

MANUAL

UNIVERSITY OF ILLINOIS LIBRARY
MAY 22

FOR THE

Normal and Industrial Training Courses

IN

KANSAS HIGH SCHOOLS.

ISSUED BY

W. D. ROSS,
State Superintendent of Public Instruction.

KANSAS STATE PRINTING OFFICE.

W. C. AUSTIN, State Printer.

TOPEKA. 1914.

5 2913



Digitized by the Internet Archive
in 2017 with funding from
University of Illinois Urbana-Champaign Alternates

375
K 13 m

PREFACE.

THE purpose of this Manual is to give a history of the normal-training high school movement in Kansas, and to set forth those requirements of the State Board of Education which must be met by all schools receiving the benefits and the privileges of the normal-training act of 1909, and of the amended act of 1911 increasing the appropriation and making provision for industrial training in high schools.

The Manual is further intended to offer suggestions as to the manner and means of conducting the work in such a way as to meet the approval of the State Board. A sufficient supply of the Manuals will be printed so that every teacher and every pupil doing the work in agriculture, domestic science and normal training may have a copy. The examinations will follow the outlines and the papers will be graded accordingly. Therefore it is imperative that the authorities of every approved school should see to it that all normal-training and industrial teachers and pupils are supplied with individual copies of the Manual and that they consult them constantly. The Manual will be furnished free of charge to all such schools by this office.

It is of supreme importance that normal-training pupils be daily led to see the great responsibility of the teaching profession. And since they are to teach in rural schools, they should be imbued with a proper spirit towards country life, and urged and aided to acquire a thorough knowledge of rural school conditions and requirements.

Superintendents and teachers by a careful reading of this Manual will find answers to many questions which will naturally arise concerning the work, and thus avoid uncertainty and unnecessary correspondence.

CONTENTS.

	<i>page</i>
Normal Training in Kansas High Schools	5
Schools Approved for Normal Training, 1913-'14	7
Industrial Training	10
Schools Approved for Industrial Training, 1913-'14	11
Normal Training Act of 1909.....	12
Supplementary Normal and Industrial Training Act of 1911	13
Normal and Industrial Training Appropriation Act of 1913	14
Normal Training Regulations	15
Industrial Training Regulations	17
Course of Study	18
Text and Reference Books	21
Outline of Subjects:	
American History	25
Civics	46
Hygienic Physiology	60
Psychology	70
Methods	76
Management	79
Arithmetic	82
Geography	95
Grammar and Composition	102
Reading	107
Agriculture	117
Domestic Science	133
Domestic Art	145
Observation Work	151
Practice Teaching	153
Examination	153
Renewal of Certificates	154

NORMAL TRAINING IN KANSAS HIGH SCHOOLS.

Since 1886 there have been a few high schools in the state authorized to offer normal-training courses and to grant graduates from such courses a two-year county teacher's certificate; but these schools have never exceeded twenty-seven in number, were widely scattered, and benefited only their own immediate localities.

Realizing the need for better schools, particularly better rural schools, and recognizing that the first requisite for better schools is better trained teachers, the Kansas Educational Commission of 1908 recommended the enactment of a law providing for a normal-training course in at least one high school in practically every county in the state. In pursuance of this recommendation the legislature passed the normal-training act, which became operative May 29, 1909. By the provisions of this act the State Board of Education was empowered to prescribe regulations under which accredited high schools might offer a course in normal training for prospective teachers. To further the work \$50,000 per year was appropriated for the biennium. This money was to be used only for the payment of additional teaching force, and was to be apportioned by the State Board of Education to deserving schools in such a way as best to serve the school interests of the entire state, provided that the amount apportioned to any one county was in no case to exceed one thousand dollars. The law further provided that to be eligible to participate in the fund a school must have at least ten students each semester in regular attendance upon the normal-training course. At the completion of their course these students should be given an examination by the State Board of Education, and upon passing such examination should receive a normal-training teacher's certificate, good in the public schools of any county in the state for a period of two years, and to be indefinitely renewable for two years at a time upon conditions fixed by the Board. Accredited academies might receive all the privileges and benefits of the act except that of state aid.

The more important regulations as first prescribed by the State Board of Education for the conduct of normal-training courses were:

The distinctively normal-training work should be given only in the senior year of a four years' high-school course, and only

seniors or postgraduates should be permitted to take it. This work was to consist of one-half year in psychology, one-half year in methods and management, a year in American history, and a review of arithmetic, geography, grammar and reading. A pedagogical reference library consisting of not fewer than thirty volumes was to be provided by each school. All teachers teaching normal-training classes were required to be graduates of accredited colleges or state normal schools, to have had at least two years' teaching experience, and to be approved for the work in question by the state superintendent of public instruction. Observation visits were made a regular part of the normal-training course, and these visits were to be made once a week, or at least often enough so that the class should make at least one visit to each grade in which each subject was taught.

As will be observed, the normal-training work was originally confined to the senior year. This was done in order that existing high-school courses might be disturbed as little as possible. But a year's experience with the work as first outlined, together with the popular demand for its extension, led the State Board to provide that, beginning with the school year 1911-'12, one-half year of hygienic physiology, one-half year of civics and one-half year of psychology should be required of all normal-training students in the junior year, together with sufficient other work from any regular high-school course to make the necessary four units; and that after that date the work in the senior year should consist of a year of American history, a year of physics, one-half year of methods and management, and a review of one-half year in arithmetic and of twelve weeks each in geography, grammar and reading, the reviews to be presented with special reference to methods of teaching. With the exception of this extension of time, the provisions and regulations as first adopted are still in effect and have proved eminently satisfactory.

For the year 1909-'10 the normal-training course was instituted in 110 high schools and academies; of the 105 counties in the state, every one in which there was a school able and willing to meet the requirements was represented in the list—78 in all. In these schools 721 seniors and postgraduates completed the normal-training work and took the prescribed examination. Of this number 615 were successful and received the state-wide renewable normal-training teacher's certificate.

For the year 1910-'11, 125 schools, representing 80 counties, were approved in accordance with the provisions of the normal-training act. In these schools 946 seniors and postgraduates completed the course and wrote upon the examination; of this number 704 were successful.

During the year 1911-'12 the normal-training course was offered, according to the regulations, in 160 schools, representing 90 counties. In these schools 1256 applicants took the examination, and of these 1125 secured certificates.

For the year 1912-'13, 189 high schools and academies located in 92 different counties of the state offered the normal-training work, and furnished almost 1500 candidates for certificates. Of these candidates more than 1200 were successful.

During the school year 1913-'14, normal-training classes were maintained in 201 schools, representing 96 counties. In these schools there were 1679 applicants for certificates, of whom 1452 passed. In addition, 2160 candidates wrote upon the junior subjects with the expectation of completing the course in 1915.

SCHOOLS APPROVED FULLY FOR NORMAL TRAINING.

1913-'14.

Abilene.	Dodge City.
Alma.	Douglass.
Alt ^t ona.	Downs.
Anthony.	El Dorado.
Arkansas City.	Ellinwood.
Ashland.	Ellis.
Atchison.	Ellsworth.
Atchison County High School. (Effingham.)	Erie.
Attica.	Eskridge.
Baldwin.	Eureka.
Belle Plaine.	Fort Scott.
Belleville.	Frankfort.
Beloit.	Fredonia.
Blue Rapids.	Galena.
Bonner Springs.	Garden City.
Bronson.	Garnett.
Bucklin.	Girard.
Burden.	Great Bend.
Burlingame.	Greeley County High School. (Tribune.)
Burlington.	Grenola.
Caldwell.	Halstead.
Cawker City.	Hanover.
Chanute.	Harper.
Chase County High School. (Cottonwood Falls.)	Hartford.
Cheney.	Herington.
Cherokee County High School. (Columbus.)	Hiawatha.
Cherryvale.	Hill City.
Cimarron.	Hoisington.
Clay County High School. (Clay Center.)	Holton.
Clyde.	Horton.
Coffeyville.	Howard.
Coldwater.	Humboldt.
Colony.	Hutchinson.
Concordia.	Iola.
Council Grove.	Jewell City.
Crawford County High School. (Cherokee.)	Junction City.
Decatur County High School. (Oberlin.)	Kingman.
Delphos.	Kinsley.
	Kiowa County High School. (Greensburg.)
	Lacrosse.
	La Cygne.

NORMAL AND INDUSTRIAL TRAINING.

SCHOOLS APPROVED FULLY FOR NORMAL TRAINING.

Lakin.	Rawlins County High School. (Atwood.)
Lane County High School. (Dighton.)	Reading.
Lawrence.	Reno County High School. (Nickerson.)
Leavenworth.	Republic.
Le Roy.	Rosedale.
Lewis.	Russell.
Liberal.	Sabetha.
Lincoln.	Saint John.
Logan.	Salina.
Lyons.	Scott County High School. (Scott City.)
Mankato.	Sedan.
Marion.	Seneca.
Marquette.	Sheridan County High School. (Hoxie.)
Marysville.	Sherman County High School. (Goodland.)
McPherson.	Smith Center.
Meade.	Spring Hill.
Medicine Lodge.	Stafford.
Minneapolis.	Sterling.
Mound City.	Stockton.
Neosho Falls.	Thomas County High School. (Colby.)
Ness City.	Tonganoxie.
Newton.	Topeka.
Norton County High School. (Norton.)	Trego County High School. (Wa Keeney.)
Okley.	Troy.
Olathe.	Valley Falls.
Onaga.	Wakefield.
Osage City.	Wamego.
Osawatomie.	Washington.
Osborne.	Wathena.
Oskaloosa.	Wellsville.
Oswego.	Wichita.
Ottawa.	Williamsburg.
Paola.	Wilson.
Parsons.	Winfield.
Peabody.	Yates Center.
Phillipsburg.	
Plainville.	
Pleasanton.	
Pratt.	
Quinter.	

SCHOOLS APPROVED FOR NORMAL TRAINING IN ALL RESPECTS EXCEPT AS TO RECEIVING STATE AID.

1913-'14.

Argonia.	Emporia.
Augusta.	Enterprise Normal Academy. (Enterprise.)
Axtell.	Fairview.
Bethel College Academy. (Newton.)	Formoso.
Burns.	Friends' University Academy. (Wichita.)
Burr Oak.	Greenleaf.
Caney.	Hesston Academy. (Hesston.)
Carbondale.	Highland.
Cathedral School. (Wichita.)	Hodgeman County High School. (Jetmore.)
Clearwater.	Kan. Wesleyan Univ. Academy. (Salina.)
Clifton.	
Dickinson County High School. (Abilene.)	

APPROVED FOR NORMAL TRAINING EXCEPT AS TO RECEIVING STATE AID.

Labette County High School. (Altamont.)	Ransom.
La Harpe.	Rose Hill.
Leon.	Sacred Heart Academy. (Salina.)
Linwood.	Sedgwick.
McPherson College Academy. (McPherson.)	Sharon:
Miltonvale Wesleyan Academy. (Miltonvale.)	Southwestern College Academy. (Winfield.)
Moline.	Spearville.
Montgomery Co. High School. (Independence.)	Sumner County High School. (Wellington.)
Mulvane.	Syracuse.
Nazareth Academy. (Concordia.)	Tabor College Academy. (Hillsboro.)
Neodesha.	Thayer.
Protection.	Valley Center.
	Wetmore.

That the normal-training movement is rapidly accomplishing the purpose for which it was instituted and is furnishing better-prepared teachers in increasing numbers for our common schools is clearly demonstrated by the following figures: The state superintendent's biennial report for 1910-'11 shows that there were then 7873 teachers employed in the rural schools of the state. Of this number but 197 had a normal-school training or its equivalent; 2379 were high-school graduates, and 1639 had attended high school one year or more, while 3658 had only such training as could be obtained in the common schools. The last biennial report of the department, however, shows 7842 rural teachers employed in the state. Of this number 238 were graduates of colleges or normal schools, 2980 were high-school graduates and 1654 had attended high school one year or more, leaving but 2970 with only a common-school training.

Indeed, the normal-training act, in conjunction with the recent legislation requiring a graduated increase in the preparation for teaching, means that within a decade no teacher will be teaching, even in the rural schools of Kansas, who has not had at least a full four years' high-school course, including specific work in normal training.

Graduates of the state normal schools are almost always able to secure grade- and high-school positions, and consequently rarely go into the country schools, nor would the establishment of additional state normal schools greatly improve conditions in this respect, because students would not feel that they could go to the expense of leaving home and taking a four years' course in order to prepare themselves to become country teachers. But the fact that under the normal-training act they can get a year's professional training in the local high-school course, and at the end of it secure a state-wide certificate good indefinitely if successfully used, is serving at once to induce more young people to enter high school with the

intention of becoming teachers and to hold more of those entering school until the course is completed.

Moreover, this new course has given the high school itself a higher place in the esteem of the people, because it serves in part to meet their demand for curricula that are more practical; for even before there was any attempt at special preparation for the work, substantially 40 per cent of all our high-school graduates went immediately to teaching.

Again, the introduction of the normal-training course has had a most salutary effect upon the entire school life of the communities concerned. It is the common observation of superintendents that the interest in school work is stimulated by the very immediate and definite end which the normal-training young people have in view, and that this feeling reaches and influences students not taking the normal work. The study of psychology, methods and management gives a new view to school problems and school responsibilities, and this awakening has had a marked effect on the attitude of the whole school toward matters of discipline and administration. Then, too, the observation work has not only greatly benefited the prospective teachers, but by reacting upon the work of the teachers visited has also resulted in infusing new life and energy into the work of the grades.

INDUSTRIAL TRAINING.

Actuated by the growing demand for industrial work in our schools, and influenced by the success of the normal-training movement, the legislature of 1911 appropriated \$25,000 per year for the biennium to encourage the introduction of courses in agriculture and home economics in schools already recognized under the normal-training act. The terms of the appropriation provided that schools approved for the normal-training course might also receive \$250 each for offering courses in agriculture and home economics, under such regulations as the State Board of Education might prescribe, provided that no school should receive the benefits of the act unless it had at least ten pupils enrolled in the industrial courses each semester. In conformity with this legislation, the State Board of Education adopted the following regulations:

1. The amount of work in agriculture required shall be one year; agriculture being defined as follows: A study of soils, and farm, garden and orchard crops; or a study of soils, farm, garden and orchard crops and animal husbandry. Laboratory work shall require two double periods per week.

2. The amount of household economics required shall be one year, and may consist of a year of cooking, or a year of cooking and sewing combined. In the event cooking and sewing are combined, three days out of the week shall be devoted to cooking and two days to sewing, laboratory work requiring double periods.

3. The ten pledgors to the industrial work required by law may be divided in any proportion between agriculture and household economics, but classes in both subjects must be maintained to entitle a school to the state aid.

4. Teachers in either of these courses must satisfy the State Board of Education of their fitness to teach the subjects, and the approval of the State Superintendent of Public Instruction shall be required in every case. General-science teachers may be approved to teach the agriculture if their preparation seems sufficient; but a year's special training for the work in some recognized industrial school is the minimum requirement for teachers of household economics.

For 1911-'12, 90 high schools qualified under the industrial-training act and enrolled 3031 students in their classes in agriculture and home economics. For 1912-'13, 96 schools were approved and offered these very popular and practical subjects to more than 3500 pupils.

The legislature of 1913 doubled the amount of aid that might be apportioned a school offering the industrial-training course, and during 1913-'14 103 schools offered the work to almost 4000 pupils.

SCHOOLS APPROVED FOR INDUSTRIAL TRAINING.

1913-'14.

Abilene.	Fairview.
Alma.	Fort Scott.
Arkansas City.	Frankfort.
Atchison.	Garden City.
Augusta.	Girard.
Baldwin.	Great Bend.
Belle Plaine.	Harper.
Belleville.	Hartford.
Beloit.	Herington.
Blue Rapids.	Highland.
Burlington.	Hill City.
Caldwell.	Hoisington.
Cawker City.	Holton.
Chanute.	Iola.
Chase County High School. <small>(Cottonwood Falls.)</small>	Jewell City.
Cherryvale.	Kingman.
Clifton.	Kinsley.
Coffeyville.	Lakin.
Colony.	Le Roy.
Council Grove.	Liberal.
Decatur County High School. <small>(Oberlin.)</small>	Lincoln.
Delphos.	Lvons.
El Dorado.	Mankato.
Ellinwood.	Marion.
Ellis.	Marysville.
Ellsworth.	McPherson.
Emporia.	Meade.
Eric.	Medicine Lodge.
Eskridge.	Minneapolis.
Eureka.	Moline.
	Mound City.

SCHOOLS APPROVED FOR INDUSTRIAL TRAINING.

Neodesha.	Scott County High School.
Newton.	(Scott City.)
Oakley.	Seneca.
Olathe.	Sherman County High School. (Goodland.)
Onaga.	Smith Center.
Oskaloosa.	Springhill.
Oswego.	Stafford.
Ottawa.	Sterling.
Paola.	Stockton.
Parsons.	Thomas County High School. (Colby.)
Peabody.	Tonganoxie.
Phillipsburg.	Topeka.
Plainville.	Trego County High School. (Wa Keeney.)
Pleasanton.	Valley Falls.
Pratt.	Wamego.
Rawlins County High School. (Atwood.)	Wathena.
Rosedale.	Wellsville.
Russell.	Williamsburg.
Sabetha.	Wilson.
Saint John.	Winfield.
Salina.	Yates Center.

THE NORMAL TRAINING ACT OF 1909.

AN ACT to provide for normal training in certain high schools and academies, and to provide for state aid to high schools giving such normal training.

Be it enacted by the Legislature of the State of Kansas:

SECTION 1. That for the purpose of affording increased facilities for the professional training of those preparing to teach, and particularly those who are to have charge of our rural schools, the State Board of Education shall make provision for normal courses of study and for normal training in such high schools as said Board of Education shall designate; provided, that said high schools shall be selected and distributed with regard to their usefulness in supplying trained teachers for schools in all portions of the state and with regard to the number of teachers required for the schools in each portion of the state.

SEC. 2. Each high school designated for normal training and meeting the requirements of the State Board of Education shall receive state aid to the amount of five hundred dollars per school year, to be paid in two equal installments, on the 1st day of March and the 1st day of June each year, from the state treasury, on a voucher certified to by its superintendent or principal and approved by the state superintendent of public instruction; provided, that no part of such money received from the state shall be used for any other purpose than to pay teachers' wages; and provided further, that in case more than one high school in any one county shall establish a normal course in accordance with the provisions of this act and shall be accredited by the State Board of Education, the total state aid distributed in such counties shall not exceed one thousand dollars, and in case there are more than two high schools in any one county designated and accredited by the State Board of Education, state aid to an amount not exceeding one thousand dollars shall be equally divided among said schools.

SEC. 3. In order that a high school shall be eligible to receive state aid under this act, it shall have in regular attendance in its normal-training courses at least ten students during each semester, and such normal-training work shall be given under such rules and regulations as the State Board of Education may prescribe, subject to the provisions of this act.

SEC. 4. On the third Friday and Saturday of May each year in each high school accredited under the provisions of this act an examination of applicants for normal-training certificates shall be conducted, under such rules as the State Board of Education may prescribe. This examination shall be in charge of two competent persons appointed by said Board. The said State Board of Education shall prepare the questions and fix the standard for the issuing of said certificates; provided, that said certificates shall be issued only to graduates of said normal courses of study, and shall be issued for a period of two years, and shall be renewable on conditions established by the State Board of Education. A fee of one dollar shall be charged each applicant, and the money so collected shall be turned over to the treasurer of the school where such examination is held, and the treasurer of such school shall pay the persons conducting said examination for their services in a sum not to exceed three dollars per day each. The manuscripts shall be properly wrapped and sealed and sent to the state superintendent of public instruction, accompanied by the fee of ten dollars from the funds of the school. All moneys received by the state superintendent of public instruction from such source shall be turned into the state treasury, and shall become available to pay the expenses incurred by the State Board of Education in securing and paying for a competent examination and grading of said manuscripts. Said certificate shall be issued by the State Board of Education, and shall be valid in any county of the state. All moneys received from such source during the fiscal years ending June 30, 1910 and 1911, are hereby appropriated to pay for said expenses of said State Board of Education. Said expenses shall be paid on the warrants of the state auditor, upon the filing of proper vouchers approved by the state superintendent of public instruction.

SEC. 5. Accredited academies are eligible to the operation of this act except as to receiving state aid.

SEC. 6. The sum of fifty thousand dollars for the fiscal year beginning July 1, 1909, and the sum of fifty thousand dollars for the fiscal year beginning July 1, 1910, or so much thereof as may be necessary, is hereby appropriated out of any funds in the general fund not otherwise appropriated, to carry out the provisions of this act.

SEC. 7. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

SEC. 8. This act shall take effect and be in force from and after its publication in the statute book.

SUPPLEMENTARY NORMAL AND INDUSTRIAL TRAINING ACT OF 1911.

AN ACT to provide appropriations for normal training in high schools in compliance with chapter 212 of the Session Laws of 1909, and to provide for the introduction of industrial training in certain high schools.

Be it enacted by the Legislature of the State of Kansas:

SECTION 1. There is hereby appropriated for normal-training courses in high schools seventy thousand dollars for the year 1912 and seventy-five thousand dollars for the year 1913, or so much thereof as may be necessary to carry out the provisions of the normal-training act of 1909, being chapter 212 thereof, and the rules and regulations of the State Board of Education made in accordance therewith; provided, that no high school situated in the cities having state normal schools shall receive said aid.

SEC. 2. There is hereby appropriated for the year 1912 twenty-five thousand dollars, and for the year 1913 twenty-five thousand dollars, to be expended as follows, and to be distributed in the same manner as is provided for the distribution of the state aid for normal-training courses:

Any high schools that now maintain a normal-training course under the provisions of chapter 212 of the Session Laws of 1909, or that shall put into operation such normal-training course, shall be entitled to the sum of two hundred and fifty dollars per annum; provided, that such schools shall also maintain courses in the elements of agriculture and domestic science under such provisions and regulations as may be established by the State Board of Education; and further provided, that no such school shall be eligible to the two hundred and fifty dollars annual state aid, or any part thereof, that shall not have at least ten pupils enrolled in such industrial courses each semester; and provided further, that the same rules and regulations as to examinations shall apply as in the case of the normal-training act.

SEC. 3. That this act shall take effect and be in force from and after its publication in the statute book.

NORMAL AND INDUSTRIAL TRAINING APPROPRIATION ACT OF 1913.

AN ACT to provide appropriations for normal training in high schools in compliance with chapter 212 of the Session Laws of 1909 and chapter 24 of the Session Laws of 1911, and to provide for the introduction of industrial training in certain high schools.

Be it enacted by the Legislature of the State of Kansas:

SECTION 1. There is hereby appropriated for normal-training courses in high schools seventy-five thousand dollars (\$75,000) for the year 1914, and seventy-five thousand dollars (\$75,000) for the year 1915, or so much thereof as may be necessary to carry out the provisions of the normal-training act of 1909, being chapter 212 thereof, also provisions of the normal-training act of 1911, being chapter 24 thereof, and the rules and regulations of the State Board of Education made in accordance therewith; provided, that no high school situated in the cities having state normal schools shall receive said aid.

SEC. 2. There is hereby appropriated for the year 1914 fifty thousand (\$50,000) dollars and for the year 1915 fifty thousand (\$50,000) dollars to be expended as follows, and to be distributed in the same manner as is provided for the distribution of the state aid for normal-training courses: Any high schools that now maintain a normal-training course under the provisions of chapter 212 of the Session Laws of 1909 and the 24th chapter of the Session Laws of 1911, or that shall put into operation such normal-training course, shall be entitled to the sum of five hundred (\$500) dollars per annum; provided, that such schools shall also maintain courses in the elements of agriculture and domestic science under such provisions and regulations as may be established by the State Board of Education; and provided further, that no such school shall be eligible to the five hundred (\$500) dollars annual state aid, or any part thereof, that shall not have at least ten pupils enrolled in such industrial courses each semester. Provided that the money appropriated for the purposes of this act shall not be used to pay the salary and traveling expenses of high school inspection.

SEC. 3. That this act shall take effect and be in force from and after its publication in the statute book.

REGULATIONS.

NORMAL TRAINING.

In accordance with the terms of the law the State Board of Education has formulated the following regulations governing the approval and operation of normal-training schools:

High schools and academies to be eligible under the provisions of the normal-training act must: (1) Maintain a four-year course; provided, however, that in counties in which no high school has a four-year course a three-year course may be approved. (2) In all high schools approved under the terms of the normal-training act there shall be at least three regular high-school teachers, exclusive of the superintendent; provided, however, that in those counties in which the three-year course is approved there shall be at least two regular high-school teachers, exclusive of the superintendent; provided further, that in counties in which no organized high school can meet the condition as to the number of teachers, these requirements may be modified at the discretion of the State Board of Education. (3) A teacher shall not teach more than seven classes a day. (4) Before determining the eligibility of any high school there shall be sent to the state superintendent by the superintendent or board of education a certified list of pupils agreeing to undertake the normal-training course, and who shall have signed the following pledge: "We, the undersigned, hereby declare that our object in asking admission to the normal-training class in _____ high school is to prepare ourselves for teaching, and it is our purpose to engage in teaching in the public schools of Kansas at the completion of such preparation. We pledge ourselves to remain in the class the required time unless prevented by illness, or unless excused by the state superintendent of public instruction." All pupils who sign the pledge to take the normal-training course must be members either of the junior or senior class (these may be either juniors or seniors at time of signing, or those who will be juniors or seniors the coming year), or graduates of an accredited high school. Said list shall be sent to the state superintendent by June 1, each year. (5) A reference library consisting of at least thirty volumes, and covering the suggestive list which will be offered later, and from which not less than two books shall be selected on each of the following subjects, will be required: Principles of education, methods of instruction, school management, industrial education, elementary agriculture, history of education.

The requirements for entrance of pupils to the normal-training course shall be the same as the recognized standard of entrance to any other course in accredited high schools.

Regular members of any high school, or the graduates of any high school, or any teacher holding a certificate whose previous work entitles her to enter the junior or senior year of an accredited high school, shall be eligible to take the normal-training course.

Students graduating in the normal courses, if nonresidents of the district, shall not be charged tuition for the last year of the course.

The normal training course, as herein outlined, represents the work that is expected will be done by all high schools operating under the provisions of this act. It is required that the following distinctly normal-training work shall be done in the third year, namely:

Civics, one-half unit.

Physiology, one-half unit.

Psychology, one-half unit.

The distinctively normal-training work for the fourth year shall consist of:

Methods and management, including a certain amount of observation and training work, one-half unit.

Review of arithmetic, one-half unit.

Review of other common branches, one unit.

The additional work specifically required of normal-training students is:

American history, one unit.

Physics, one unit.

Agriculture, at least one-half unit beginning with class of 1917.

The State Board further determined:

First.—That in addition to the arithmetic the reviews provided for in the senior year of the normal-training course shall consist of at least twelve weeks each of review work in geography, grammar and reading; and it is expected that in all these reviews large emphasis shall be given to methods as well as to matter.

Second.—That the subjects for final examination in the junior year shall be civics, physiology, and psychology; that those for final examination in the senior year shall be American history, methods, management, arithmetic, geography, grammar, and reading, and that candidates for the normal-training certificates must take the examinations in all the above-named subjects.

Third.—That the requirements as to the educational training of instructors in the normal-training courses in high schools accredited by the State Board shall be: *First*, said instructors shall be graduates from the four-year course of the Kansas State Normal School, or of an accredited state normal school; or, *second*, they shall be graduates of the University of Kansas, or of an accredited college or university, and they shall have had at least two years of successful teaching experience; or, *third*, they shall be educators of recognized and advanced scholastic and professional training and of wide experience in public-school work; and *fourth*, the selection of such instructors having in particular charge the normal-training courses shall be approved by the state superintendent of public instruction; and these qualifications shall apply to instructors in psychology, methods and management, the review subjects, and the supervisor of observation work.

Fourth.—That all academies and high schools establishing normal-training courses in compliance with the rules and regulations of the State Board of Education, *and not receiving state aid*, may be designated and accredited by the State Board without reference to the number of pupils taking such course; provided, that all the other requirements shall be carried out, and the graduates of such schools shall be entitled to the privilege of certification upon examination by the State Board.

Fifth.—That county high schools shall be eligible to all the provisions of the normal-training act; provided, that they agree to conform to conditions required by law, including the requirement relative to examination and certification as set forth in the normal-training act of 1909.

Sixth.—That all two-teacher high schools shall add one additional teacher in order to be eligible to the terms of the normal-training act.

ADDITIONAL OBSERVATIONS.

For the sake of uniformity and for the benefit of pupils transferring from one approved school to another during the school year, the distinctively normal-training subjects should be given in the order indicated in the Normal-Training course printed on page 20.

Since only those who complete the four years of the normal-training course are eligible to examination, it is required that juniors and seniors only be allowed to sign the pledge to take the normal-training work. Those juniors who have signed the pledge will be counted as part of the ten required by law. It is expected that in the matter of the reviews

in arithmetic, geography, grammar and reading no one but the normal-training students or those expecting to prepare to teach will be permitted to join these classes. The work itself is of such a specific nature and the time devoted to it so short that it would undoubtedly interfere greatly with the progress of the classes if others than those intimately interested in the teaching problem were permitted to become members.

In the other distinctively normal-training studies other than the pledges may be permitted to enter, though it is believed that it would be much better in the case of psychology and methods and management to confine the membership to the normal-training pupils. In the case of American history, while there need be no great difference in the character of the treatment of this subject for the normal-training pupils, and consequently no second class in this subject need be formed, nevertheless the teacher should keep constantly in mind the fact that a portion of the class at least are preparing to teach, and frequent suggestions relative to the best methods of teaching this important subject should be a definite part of the work.

INDUSTRIAL TRAINING REGULATIONS.

Pursuant to the provisions of the industrial-training act of 1911, the State Board of Education has prescribed the following regulations in regard to the work in agriculture and domestic science.

Agriculture.—The amount of work in agriculture required shall be one year; agriculture being defined as follows: a study of soils and farm, garden and orchard crops; or a study of soils, farm, garden and orchard crops and animal husbandry. Laboratory work shall require double periods.

Domestic Science.—Domestic science is interpreted to mean what is now generally termed home economics, or household arts, and hence to include both cooking and sewing. The amount of domestic science required shall be one year, and may consist of a year of cooking, or a year of cooking and sewing combined. It is recommended, in the event cooking and sewing are combined, that three days out of the week shall be devoted to cooking, and two days to sewing, laboratory work requiring double periods.

The ten pledges to the industrial work required by law may be divided in any proportion between agriculture and domestic science, but classes in both subjects must be maintained to entitle a school to the state aid.

The Board recommends that the domestic science and agriculture be offered in the sophomore year, and suggests that if necessary they may be substituted for botany; it being the thought that agriculture will be taken by the boys and domestic science by the girls.

It was further agreed by resolution that teachers in either of these courses must satisfy the State Board of Education of their fitness to teach these subjects, and that the approval of the state superintendent of public instruction will be required in every case. General science teachers may be approved to teach the agriculture if their preparation seems sufficient; but a year's special training for the work in some recognized industrial school is the minimum requirement for teachers of domestic science.

THE COURSE OF STUDY.

GENERAL LIST OF HIGH-SCHOOL SUBJECTS.

The following list includes all of the subjects which are ordinarily taught in high schools. These are distinguished respectively as required and elective. The required subjects are those in which every high-school student should receive at least elementary instruction. The elective group includes all other high-school subjects which may be elected under such restrictions as are made by the individual school and for a particular course.

The list of electives may be extended or curtailed in accordance with local conditions and facilities.

Numbers in parentheses refer to consecutive terms of study. Fifteen units of credit are required for graduation.

Not more than four units of work should ordinarily be attempted in any one year.

Electives should be chosen so as to include three units in some subject besides English and two units in some additional subject.

FIRST YEAR.

FIRST TERM.

Required:

- English (1).
- Algebra (1).

Elective:

- Physical Geography.
- Elementary General Science.
- Ancient History (1).
- Latin (1).
- German (1).
- Music (1).
- Drawing and Design (1).
- Mechanical Drawing (1).
- Woodworking (1).
- Domestic Art (1).
- Commercial Arithmetic (1).
- Penmanship (1).

SECOND TERM.

Required:

- English (2).
- Algebra (2).

Elective:

- Citizenship.
- Ancient History (2).
- Latin (2).
- German (2).
- Music (2).
- Drawing and Design (2).
- Mechanical Drawing (2).
- Woodworking (2).
- Domestic Art (2).
- Commercial Geography.
- Penmanship (2).

SECOND YEAR.

FIRST TERM.

- Required:*
 English (3).
 Geometry (1).
Elective:
 Botany (1).
 Mediæval and Modern History (1).
 Agriculture (1).
 Latin (3).
 German (3).
 Greek (1).
 French (1).
 Music (3).
 Drawing and Design (3).
 Mechanical Drawing (3).
 Woodworking (3).
 Domestic Science (1).
 Bookkeeping (1).
 Any elective offered in preceding terms.

SECOND TERM.

- Required:*
 English (4).
 Geometry (2).
Elective:
 Botany (2).
 Mediæval and Modern History (2).
 Agriculture (2).
 Latin (4).
 German (4).
 Greek (2).
 French (2).
 Music (4).
 Drawing and Design (4).
 Mechanical Drawing (4).
 Woodworking (4).
 Domestic Science (2).
 Bookkeeping (2).
 Any elective offered in preceding terms.

THIRD YEAR.

FIRST TERM.

- Required:*
 English (5).
Elective:
 Algebra (3).
 Chemistry (1).
 Zoölogy (1).
 English History (1).
 Latin (5).
 German (5).
 Greek (3).
 French (3).
 Forging (1).
 Stenography (1).
 Typewriting (1).
 Any elective offered in preceding terms.

SECOND TERM.

- Required:*
 English (6).
Elective:
 Solid Geometry.
 Chemistry (2).
 Zoölogy (2).
 English History (2).
 Civics.
 Latin (6).
 German (6).
 Greek (4).
 French (4).
 Forging (2).
 Stenography (2).
 Typewriting (2).
 Any elective offered in preceding terms.

FOURTH YEAR.

FIRST TERM.

- Required:*
 History if not taken before.
 Science, if not taken before.
Elective:
 English (7).
 Advanced Algebra.
 Physics (1).
 Physiology.
 American History (1).
 Latin (7).
 German (5).
 Greek (5).
 French (5).
 Economics.
 Domestic Science (3).
 Methods and Management.
 Review of Common Branches.
 Any elective offered in preceding terms.

SECOND TERM.

- Required:*
 History if not taken before.
 Science, if not taken before.
Elective:
 English (8).
 Trigonometry.
 Physics (2).
 Physiology.
 American History (2).
 Latin (8).
 German (6).
 Greek (6).
 French (6).
 Commercial Law.
 Domestic Science (4).
 Review of Arithmetic.
 Review of Common Branches.
 Any elective offered in preceding terms.

NORMAL-TRAINING COURSE.

The following course meets the requirements of the State Board of Education for high schools which are approved for normal training.

Electives should be chosen in accordance with the arrangement given in the preceding general list of high-school subjects.

Fifteen units are required for graduation, but credits must be made in all the prescribed subjects.

The course should include three units in some subject besides English, and two units in some additional subject.

If two units in a foreign language are included in the electives, this course will be satisfactory for admission to most colleges.

FIRST YEAR.

FIRST TERM.

English.
Algebra.
Two electives.

SECOND TERM.

English.
Algebra.
Two electives.

SECOND YEAR.

FIRST TERM.

English.
Geometry.
Two electives.

SECOND TERM.

English.
Geometry.
Two electives.

THIRD YEAR.

FIRST TERM.

English.
Physiology.
Agriculture.*
One elective.

SECOND TERM.

English.
Psychology.
Civics.
One elective.

FOURTH YEAR.

FIRST TERM.

American History.
Physics.
Methods and Management.
Reviews.

SECOND TERM.

American History.
Physics.
Arithmetic.
Reviews.

Twelve weeks each in Geography, Grammar, and Reading.

INDUSTRIAL-TRAINING COURSE.

If agriculture and domestic science are offered as two of the subjects the above normal-training course will also satisfy the requirements of the State Board with reference to the state appropriation for these subjects.

* A credit of at least one-half unit in agriculture will be required of all normal training graduates, beginning with class of 1917.

TEXT AND REFERENCE BOOKS.

TEXTBOOKS.

The following are the textbooks prescribed by the State Board of Education as the basis of the work in the Normal Training and Agricultural classes:

ARITHMETIC.

The state text.

GEOGRAPHY.

The state text; but pupils will also be expected to read and discuss Sutherland's *The Teaching of Geography*, published by Scott, Foresman & Co., Chicago.

GRAMMAR.

Gowdy's *English Grammar*, published by Allyn & Bacon, Chicago, Ill., and state text.

READING.

Essentials of Teaching Reading, by Sherman and Reed, published by the University Publishing Company, Lincoln, Neb.

AMERICAN HISTORY.

Muzzey's *American History*, Ginn & Co., Chicago, or James and Sanford's *American History*, published by Charles Scribner's Sons, Chicago, Ill., or Channing's *Student History of the United States*, published by the Macmillan Company, Chicago, Ill., or McLaughlin's *History of the American Nation*, published by D. Appleton & Co., Chicago, Ill.

PSYCHOLOGY.

Betts's *The Mind and Its Education*, published by D. Appleton & Co., Chicago, Ill.

METHODS.

Charters' *Teaching the Common Branches*, published by Houghton, Mifflin & Co., Chicago.

MANAGEMENT.

Seeley's *A New School Management*, published by Hinds, Noble & Eldridge, New York, N. Y.

CIVICS.

Boynton and Bates's *School Civics*, with *Civics of Kansas*, published by Ginn & Co., Chicago, Ill., or James, Sanford and Dykstra's *Government of State and Nation*, published by Chas. Scribner's Sons, Chicago.

HYGIENIC PHYSIOLOGY.

Conn and Budington's *Advanced Physiology and Hygiene*, published by Silver, Burdett & Co., Chicago.

AGRICULTURE.

Warren's *Elements of Agriculture*, published by Macmillan Company, Chicago; and Eliff's *A Unit in Agriculture*, published by Row, Peterson & Co., Chicago, Ill., or Call & Shaffer's *Laboratory Manual in Agriculture*, published by the Macmillan Company, Chicago, Ill.

DOMESTIC SCIENCE.

No text in domestic science is prescribed for the reason that no single satisfactory book has yet been published. The theoretical side of the subject will have to be gotten from lectures by the teacher and from library reference work.

REFERENCE BOOKS.

For lists of the necessary library reference books in agriculture, American history, civics, domestic science, physiology and reading see the outlines of work in these subjects in the following pages. In a number of schools the visits of the inspector and the results of the normal-training examination have both shown the American history library to be especially weak.

In addition to the above, the following list of books was selected for the pedagogical reference library which each approved school has agreed to purchase. The first thirty volumes are regarded as the ones which it is essential that every normal-training high school shall procure. Those following are suggested as highly desirable supplementary references, and it is hoped that many school boards will see their way to purchase a number of these in addition to the required list:

1. The Educative Process, Bagley.
The Macmillan Company, Chicago.
2. The Theory of Teaching, Salisbury.
Row, Peterson & Co., Chicago.
3. Talks on Pedagogics, Parker.
A. S. Barnes & Co., New York.
4. The Art of Teaching, White.
American Book Company, Chicago.
5. The Elements of Pedagogy, White.
American Book Company, Chicago.
6. School Management, White.
American Book Company, Chicago.
7. School Management, Dutton.
Charles Scribner's Sons, Chicago.
8. Method of Education, Roark.
American Book Company, Chicago.
9. Waymarks for Teachers, Sara Louise Arnold.
Silver, Burdett & Co., Chicago.
10. The Teaching of Geography, Sutherland.
Scott, Foresman & Co., Chicago.
11. Great American Educators, Winship.
American Book Company, Chicago.
12. History of Common School Education, Anderson.
Henry Holt & Co., New York.
13. Teaching a District School, Dinsmore.
American Book Company, Chicago.
14. Common Sense Didactics, Sabin.
Rand, McNally & Co., Chicago.

15. The Making of a Teacher, Brumbaugh.
Sunday School Times, Philadelphia.
16. Education by Plays and Games, Johnson.
Ginn & Co., Chicago.
17. Reading: How to Teach It, Arnold.
Silver, Burdett & Co., Chicago.
18. How to Teach Reading, Clark.
Scott, Foresman & Co., Chicago.
19. How to Tell Stories to Children, Bryant.
Houghton, Mifflin & Co., Chicago.
20. Talks to Teachers on Psychology, James.
Henry Holt & Co., New York.
21. Psychology, Brief Course, James.
Henry Holt & Co., New York.
22. Thinking and Learning to Think, Schaeffer.
J. B. Lippincott & Co., Philadelphia.
23. Psychologic Method in Teaching, McKeever.
A. Flanagan & Co., Chicago.
24. Among Country Schools, Kern.
Ginn & Co., Chicago.
25. Elements of Agriculture, Warren.
The Macmillan Company, Chicago.
26. Principles of Agriculture, Bailey.
The Macmillan Company, Chicago.
27. Elements of General Method, McMurry.
The Macmillan Company, Chicago.
28. The Method of Recitation, McMurry.
The Macmillan Company, Chicago.
29. Educational Wood Working for School and Home, Park.
The Macmillan Company, Chicago.
30. Sewing Course, Mary Woolman.
Frederik A. Fernald, Buffalo, N. Y.
31. Special Method in History, McMurry.
The Macmillan Company, Chicago.
32. Special Method in Elementary Science, McMurry.
The Macmillan Company, Chicago.
33. Nature Study Lessons, McMurry.
The Macmillan Company, Chicago.
34. Special Method in Geography, McMurry.
The Macmillan Company, Chicago.
35. Special Method in Reading for the Grades, McMurry.
The Macmillan Company, Chicago.
36. Special Method in Language, McMurry.
The Macmillan Company, Chicago.
37. Special Method in Arithmetic, McMurry.
The Macmillan Company, Chicago.
38. One Hundred Lessons in Elementary Agriculture, Nolan.
Acme Publishing Company, Morgantown, W. Va.
39. Agriculture for Beginners, Burkett, Stevens and Hill.
Ginn & Co., Chicago.
40. The Teaching of English, Chubb.
The Macmillan Company, Chicago.
41. The Theory and Practice of Teaching, Page.
American Book Company, Chicago.

42. History of Education, Seeley.
American Book Company, Chicago.
43. The Teacher at Work, Bender.
A. Flanagan & Co., Chicago.
44. Mistakes in Teaching, Hughes.
A. S. Barnes & Co., New York.
45. Elementary Experiments in Psychology, Seashore.
Henry Holt & Co., New York.
46. Ethics for Young People, Everett.
Ginn & Co., Chicago.
47. Cardboard Construction, Trybom.
The Milton Bradley Co., Springfield, Mass.
48. The Best Method of Teaching in Country Schools, Lind.
Hinds, Noble & Eldredge, New York.
49. Classroom Management, Bagley.
The Macmillan Company, Chicago.
50. Jean Mitchell's School, Wray.
Public School Publishing Co., Bloomington, Ill.
51. Education in the United States, Boone.
D. Appleton & Co., Chicago.
52. Pedagogy, Barrett.
D. C. Heath & Co., Chicago.
53. Management and Methods, Sanders.
A. S. Barnes & Co., New York.
54. Educational Reformers, Quick.
D. Appleton & Co., Chicago.
55. Standards in Education, Chamberlain.
American Book Company, Chicago.
56. Phelps and His Teachers, Stephens.
Hammond & Stephens, Fremont, Neb.
57. Agriculture for Common Schools, Fisher and Cotton.
Charles Scribner's Sons, Chicago.
58. Nature Study and Life, Hodge.
Ginn & Co., Chicago.
59. Philosophy of Education, Horne.
The Macmillan Company, Chicago.
60. Educational Aims and Educational Values, Hanus.
The Macmillan Company, Chicago.

OUTLINE OF SUBJECTS.

AMERICAN HISTORY.

In the successful teaching of history the two most essential requisites on the part of the teacher are the ability to arouse the interest of the pupils and the faculty of leading them to see relations. And the following course of study, since it is intended primarily for the use of teachers of other prospective teachers, has been prepared with this thought in mind rather than with the view of including all topics that will necessarily be touched upon in a year's work in the subject. In other words, the outline is intended to be such a one as shall carry with it some thought of proper methods of teaching as well as serve as a guide for systematic study.

Inasmuch, too, as the great majority of those who may pursue this course expect to become teachers in the common schools, it may not be out of place here to point out the kind of an introduction all pupils should have to history before taking up the normal study of the subject.

Beginning not later than the third grade, pupils should be introduced to the unconscious study of history through the medium of story and biography. This work should be continued through the fourth and fifth grades. It should be a *regular* part of the school curriculum and should be given *not less* than twice a week. This may be done in connection with the language work or, when opportunity offers, in connection with the reading lesson; *but it should be given*. It should constantly introduce new historic facts and incidents which by their nature and by the form in which they are presented will entertain and consequently interest the children. These stories are much better told than read, but occasionally may be read. They should invariably be reproduced either orally or in writing by the pupils, and the pupils should be encouraged to find out for themselves additional facts or similar incidents to relate.

All this necessarily presupposes the ability on the part of the teacher to tell stories. And no teacher is properly equipped to teach young children until this ability has been developed. An excellent manual for this purpose is Bryant's How to Tell Stories to Children, published at one dollar by Houghton, Mifflin & Co., Chicago.

As sources of suitable material for the stories themselves the following are suggested:

	List price.
First Book of American History, Eggleston. American Book Company, Chicago	60 cents.
Stories of American Life and Adventure, Eggleston. American Book Company, Chicago.....	50 "
Great Americans for Little Americans, Eggleston. American Book Company, Chicago.....	40 "
Pioneer History Stories, McMurry. Macmillan Company, Chicago, 3 vols., each.....	40 "
American Pioneers, Mowry. Silver, Burdett & Co., Chicago... .	65 "
American Leaders and Heroes, Gordy. Charles Scribner's Sons, Chicago	65 "

After the completion of the story and reproduction work in the fifth grade some interesting and well-connected narrative primary history, such as McMaster's, should be taken up in the sixth grade. If the book selected be itself well written and be supplemented by additional oral matter the pupils should by the end of the year have acquired sufficient interest in, and insight into, their country's history satisfactorily to take up the formal study of the subject. But without such a foundation they will be utterly unprepared to do so.

The department begs to acknowledge its obligation to different sources for material contained in the following pages, and to express the hope that the manner in which it has been put together may be of some service to those for whom it is intended.

For the satisfactory completion of the outline the following is submitted as the minimum list of reference books which should be available for the use of the pupils:

PEDAGOGICAL REFERENCE BOOKS.

	List price.
Report of Committee of Seven on History. The Macmillan Company, Chicago.....	\$1.50
The Teaching of History and Civics, Bourne. Longmans, Green & Co., Chicago.....	1.50

HISTORICAL REFERENCE BOOKS.

	List price.
Student's History of United States, Channing. Macmillan Company, Chicago.....	\$1.40
Epochs of American History. Longmans, Green & Co., Chicago, 3 vols., each.....	1.25
Discovery of America, Fiske. Houghton, Mifflin & Co., Chicago, 2 vols., each.....	2.00
American Revolution, Fiske. Houghton, Mifflin & Co., Chicago, 2 vols., each.....	2.00
The Critical Period, Fiske. Houghton, Mifflin & Co., Chicago, 1 vol.....	2.00
Civil Government, Fiske. Houghton, Mifflin & Co., Chicago, 1 vol.....	1.00
The Struggle for a Continent, Parkman. Little, Brown & Co., Boston.....	1.50
History of the Presidency, Stanwood. Houghton, Mifflin & Co., Chicago.....	2.50
Bird's Eye View of Our Civil War, Dodge. Houghton, Mifflin & Co., Chicago.....	1.00
American Politics, Johnson. Henry Holt & Co., New York.....	.80
American History Series. Charles Scribner's Sons, Chicago, 7 vols., each.....	1.00
Documentary Source-book of American History, Macdonald. Macmillan Company, Chicago	2.00

ADDITIONAL REFERENCE BOOKS.

Whenever it can possibly be done the following additional titles should also be procured:

	List price.
The Beginners of a Nation, Eggleston. D. Appleton & Co., Chicago.....	\$1.50
The American Revolution, Lecky (English view). D. Appleton & Co., Chicago.....	1.00
Expansion of the American People, Sparks. Scott, Foresman & Co., Chicago.....	2.00
Twenty Years of Congress, Blaine. Published by subscription, but may be gotten second-hand through dealers.	
History of the United States, Schouler. Dodd, Mead & Co., New York, 6 vols., each,	2.25

List price.

The United States in Our Own Time, Andrews.	Charles Scribner's Sons, Chicago.	\$5.00
American History as Told by Contemporaries, Hart.	Macmillan Company, Chicago, 4 vols., each.	1.75
How to Study and Teach History, Hinsdale.	D. Appleton & Co., Chicago.	1.50
Guide to the Study of American History, Channing and Hart.	Ginn & Co., Chicago.	2.00
No. 17 Crane Classics, Blackmar.	Crane & Co., Topeka (cloth).	.25
The Teaching of American History, McLaughlin.	D. Appleton & Co., Chicago.	Free.

NOTE.—By submitting the entire list to several extensive dealers for quotations and stating that the books are for school library purposes a material reduction from the above prices may be obtained.

OUTLINE OF AMERICAN HISTORY.

The topics here outlined should be thoroughly discussed in class, different authorities should be consulted on methods of teaching history, and in the classroom work, observation work, and practice teaching the conclusions drawn should be kept constantly in mind.

1. Historical study.
 - A. What it is—a study of the highest form of life activity.
 - B. Why pursued in the schools.
 1. Information.
 2. Inspiration.
 3. Appreciation of duties and responsibilities.
 4. Awaken interest in historical reading and activities of men.
 5. Develop ability to judge and reason.
 6. Direct the development of the imagination.
 7. Gain knowledge of books and skill in handling them.
 8. Develop the ability to classify facts.
 9. Develop scientific habit of mind.
 10. Make the world better by avoiding repetition of the mistakes of the past.
 2. Methods of historical study.
 - A. In primary grades.
 1. Subject matter.
 - a. Character of.
 - b. How obtained.
 - c. How presented.
 - d. How used by pupils.
 2. What should be accomplished in—
 - a. Biography.
 - b. Anniversary celebrations.
 - c. Current history.
 - d. Historical reading and interest.
 - B. In intermediate grades.
 1. Subject matter.
 - a. Character of.
 - b. How used.
 - c. How correlated.
 - d. Kinds that should not be used.
 2. Results to be secured in—
 - a. Information.
 - b. Reading habits.
 - c. Character of reading matter.
 - d. Formation of ideals.
 - e. Training for citizenship.
 - f. Attitude toward fellow pupils, the school, and the public.
 - C. In grammar grades.
 1. The teacher.
 - a. Preparation.
 - b. Historical library.
 - c. His interest in present-day activities of the world at large.

2. Methods of historical study.—*continued.*
 - C. In grammar grades.
 2. Subject matter.
 - a. Textbook.
 - b. Outline books.
 - c. Supplementary books.
 - d. Collateral reading.
 - e. Source books.
 - f. Secondary works. (Instructor should distinguish clearly between source books and secondary works, and point out examples of each in school library.)
 - g. Outline maps. (The Foster maps, by the Historical Publishing Company, Topeka, and the Ivanhoe maps, by Atkinson, Mentzer & Grover, Chicago, approved by State Textbook Commission.)
 3. Manner of handling the subject.
 - a. Uses to be made of—
 1. Written work.
 2. Special reports in class.
 3. Theme work on special topics for investigation.
 4. Progressive map work.
 5. Notebook.
 - b. Relative advantages or disadvantages of outlines. (Hall's Outlines, A. Flanagan & Co., Chicago, 30 cents, postpaid; approved by State Textbook Commission.)
 1. Made entirely by the student.
 2. Made to direct the student but to be completed by him. "Learning by doing."
 3. Fully prepared.
 - c. Teacher and class.
 1. Nature of questions asked.
 2. Discussion of motives of character studied.
 3. Use of hypothetical questions in training to judge results, such as: Would the Mississippi valley have been settled as soon had the early explorers and settlers come to the Pacific instead of to the Atlantic coast of America? with reasons for answer.
 4. Suitable texts, supplementary books, and reference works for properly teaching United States history.

DISCOVERY AND EXPLORATION.

1. Relation between geography and history. (See Channing's Student's History of United States, or for still fuller treatment Brigham's Geographic Influences in American History, \$1.25, Ginn & Co., Chicago.)
 - A. Temperature.
 - B. Rainfall.
 - C. Land configuration.
 - D. Navigable rivers.
 - E. Scientific discoveries and inventions.
2. The aborigines. (For this and discovery and naming of America, see especially Fiske's Discovery of America.)
 - A. Origin.
 - B. Relation to Mound Builders.
 - C. Appearance, character, and manner of life.
 - D. Number in 1492 and now.
 - E. Name and location of chief tribes.

3. Pre-Columbian discoveries of America.
 - A. The Northmen.
 1. When, where, and why.
 2. Proofs of their discovery.
 3. Importance.
 - B. Other nations making claims.
 1. Evidence.
 2. Importance.
4. The discovery of America by Columbus.
 - A. Causes.
 1. Scientific—The Toscanelli letter and map. (This and following subtopics are intended as merely suggestive and not exhaustive.)
 2. Literary—the revival of learning.
 3. Commercial—the fall of Constantinople.
 4. Religious.
 5. Miscellaneous.
 - B. Christopher Columbus.
 1. Life and character.
 2. Voyages.
 - a. Number, purposes and results of each.
 - b. General results.
5. The naming of America.

(Show connections of following: Line of demarcation, Vasco de Gama, Cabral, Americus Vespuccius, and Waldseemüller.)

 - A. Was the naming the result of deception and fraud, or was it the logical outcome of events?
6. Discoveries and explorations of Spanish, English, French, Portuguese, and Dutch. Give in regard to each—
 - A. Time.
 - B. Place.
 - C. By whom.
 - D. Conflicting claims to territory as a result.
7. Early attempts at settlement.
 - A. Where made.
 - B. By whom.
 - C. Why. (Compare those of different countries. Show the effect upon Spanish colonization, and upon Spain herself, of the easily gotten wealth she found in the new world.)
8. Effect of defeat of "Spanish Armada" upon settlement and later history of America.
9. Treatment of the Indians.
 - A. By the Spanish.
 - B. By the English.
 - C. By the French.
 - D. By the Dutch.
 - E. Results.

PERMANENT ENGLISH COLONIZATION.

1. Study each of the thirteen colonies by the following outline:
 - A. Name of colony.
 - B. Place settled.
 - C. Date of settlement.
 - D. Classes of colonists and leading persons.
 - E. Object of settlement.
 - F. Forms of government, local and in relation to the mother country.
 - G. Religion.
 - H. Education.
 - I. Important events in history of the colony.

2. Adaptability of colonists and country to each other in each of the thirteen colonies. (Have pupils notice wherein location influences development, as study progresses.)
3. Some topics worthy of special study in connection with early colonial history.
 - A. Boundary questions. (See Channing's Student's History, Thwaites' The Colonies, in Epochs of American History.)
 1. Virginia by charters of 1606, 1609, and 1612.
 2. Pennsylvania—Mason and Dixon line, extended how far west?
 3. Connecticut.
 4. Southern boundary of Maryland.
 - B. Forms of local government. (See Fiske's Civil Government, and Sloan's French War and the Revolution, chap. II, in American History Series.)
 1. The country as a unit.
 - a. Where found.
 - b. Why.
 - c. Effect on later local and national government.
 2. The town as the unit.
 - a. Where found.
 - b. Why.
 - c. Effect on later local and national government.
 - C. Religious affairs. (See Sloan's French War and the Revolution, chap. II.)
 1. How regarded in each colony.
 2. Troubles:
 - a. With Roger Williams.
 - b. With Anne Hutchinson.
 - c. Salem witchcraft.
 - d. In Maryland—toleration act of 1649, and later troubles.
 - e. Gradual growth of toleration.
 - D. Notable failures and their causes.
 1. Communism.
 2. Locke's "Grand Model."
 3. Oglethorpe's philanthropy.
 - E. Introduction of slavery and representative government in Virginia, 1619.
 - F. "Fundamental Orders of Connecticut," 1639, the first real constitution in America.
 1. What provision of our present constitution comes from this Connecticut constitution of 1639?
 - G. United Colonies of New England, 1643—beginning of the principle of federation. (Every step in the development of this principle should be traced as study progresses.)
 - H. Indentured servants—"the poor whites."

THE STRUGGLE FOR A CONTINENT.

The instructor should show, and have the pupils verify so far as possible, that the first three intercolonial wars had their origin in European conditions—in the struggle of England and France for world supremacy—while the French and Indian War began in America over American conditions, though European considerations later became involved. The Medieval and Modern History of West, Myers, or any other good authority, will give the necessary facts.

1. Intercolonial wars previous to the French and Indian War.
 - A. Cause of each.
 - B. Results in Europe as well as in America.

2. The French and Indian War.
 - A. Causes—remote and immediate—in Europe and America.
 - B. Events leading to the war:
 1. On part of English.
 2. On part of French.
 - C. The three most important strategic points (why?) and their capture—Fort Duquesne, Louisburg, and Quebec.
 - D. Minor events.
 - E. Results: For England, France, Spain, and the colonies. (A "turning point in the world's history." Why?)
 - F. The proclamation line of 1763—purpose and result. (See Foster's History of the United States.)
 - G. Conditions in the Colonies, 1760-1770. (See Davidson, Sloan, and Alice Morse Earle's Home Life in Colonial Days, popular edition, 50 cents, Macmillan Company, Chicago.)
 1. Population—its distribution; composite character.
 2. Social life.
 3. Occupations.
 4. Education.
 5. Books and literature.
 6. Political life.

THE REVOLUTION.

1. Colonial policy of England. (In studying this topic the general European view of colonies should be investigated, the attitude of England toward her colonies should be compared with that of other countries, and—as always in the study of history—the spirit and conditions of the time should be considered.)
 - A. Before 1760.
 - B. After 1760, with reasons for change.
2. Navigation laws, and acts of trade.
 - A. Purpose of earlier acts.
 - B. Purpose of later acts.
 - C. Difficulties of enforcing.
 - D. Writs of assistance. (Compare with search warrants as authorized by our present constitution.)
 - E. Ideas of colonists as to legality of writs—actual legality.
 - F. Ideas of colonists as to legality of navigation acts—actual legality.
3. Ideas of representation and extent of right of suffrage. (See McLaughlin's History of the American Nation, and Channing, and investigate the question of parliamentary reform in England; for the latter purpose any good English history will serve.)
 - A. British.
 - B. Colonial.
4. New attempts at colonial taxation.
 - A. Stamp act—reasons for; provisions; kinds of tax.
 1. Results—stamp-act congress—repeal.
 - B. Declaratory act.
 - C. Townshend acts (emphasize *all* of them); kind of tax; purpose for which to be used; changing attitude of colonists, and why.
 - D. Nonimportation agreements.
 - E. Boston massacre.
 - F. Committees of correspondence.
 - G. Boston tea party; changed attitude of colonists regarding taxation.
 - H. The five intolerable acts—name, provisions, and purpose of each.

5. Other causes of the Revolution.
 - A. "The Parson's Cause"—Patrick Henry and his speeches.
 - B. The Gaspee affair.
 - C. George III's desire to increase the power of the king at home—to "be king," as his mother advised.
6. First continental congress—composition; purpose; authority; acts.
 - A. Results.
7. Second continental congress.
 - A. Reason for.
 - B. Authority for or legality of.
 - C. How long in existence.
 - D. Most important acts.
 - E. Did it always prove efficient? with reason for answer.
8. Declaration of Independence.
9. Military events of the war. (After considering the preliminary battles fought before the declaration of independence, a very satisfactory method of studying the Revolution is by considering it from the three purposes of the British: first, the separation of New England from the rest of the colonies; second, the capture of the capital; third, "fraying" the colonies out on the edges. And in doing this the movements of Washington may be followed consecutively to the close of the war, and movements not directly connected with these may be considered in their bearing upon them. Fiske's American Revolution is both valuable and very interesting for this period.)
 - A. Movements of Washington.
 - B. Burgoyne's campaign—results in England, France, and America.
 - C. Foreign aid.
 - D. The war in the South, and surrender of Yorktown.
 - E. The navy in the war. (See Channing for general view.)
 - F. Finances.
 - G. Other topics worthy of study.
 1. Hiring of German troops by British. In how far do these soldiers deserve the odium usually attached to the word "Hessian"? What became of most of them after the war?
 2. Work of George Rogers Clark. How connected with proclamation line of 1763, and Quebec act?
 3. Traitors—Benedict Arnold and Charles Lee. (See Fiske's American Revolution, especially concerning Lee.)
 4. The "Stars and Stripes."
 5. Why did America win?
 - H. The treaties of peace—preliminary, 1782; final, 1783. (The attitude of France and Spain, as well as of England and the colonies, should be clearly understood, and this will necessitate a full knowledge of the terms of the French alliance. It should be noted that England was willing to concede the colonies more than France and Spain were willing they should receive. For this topic and the entire period of the Confederation there is no book to be compared to Fiske's Critical Period.)
 1. Principal provisions.

THE CRITICAL PERIOD.

1. Review:
 - A. Fundamental orders of Connecticut, 1638-'39.
 - B. The New England confederation, or "United Colonies of New England."
 1. Colonies represented.
 2. Principle of representation adopted, and where found in the government of to-day.
 - C. Albany plan of union.
 1. Main provisions.
 2. Why rejected—
 - a. By England.
 - b. By the colonies.
 - D. Stamp-act congress.
 - E. First continental congress.
 - F. Second continental congress.
2. Articles of confederation. (Insist on reasons for calling this the "critical" period in American history.)
 - A. Main provisions.
 - B. Defects. (Discuss all, but especially lack of power to regulate commerce and to punish individuals.)
 - C. Attempts to amend—why unsuccessful.
 - D. Principle of representation.
3. The constitution.
 - A. Shay's rebellion—its significance.
 - B. The meeting at Alexandria, 1785—its cause and purpose.
 - C. The Annapolis trade convention, 1786—its cause and purpose.
 - D. The convention at Philadelphia, 1787—its cause and purpose.
 - E. The three great compromises:
 1. Commerce, the slave trade, and an export tax.
 2. Representation of the states—origin. (See Connecticut constitution of 1639.)
 3. Slaves and apportionment of representation and direct taxes.
 - F. Sources of.
 - G. Ratification—grounds of opposition—the "Federalist." When?
 - H. Gladstone's tribute to the constitution, with some discussion of the justice of it.
 - I. The adoption of constitution a "peaceful revolution." Why?

ORGANIZATION OF THE GOVERNMENT AND FORMATION OF POLITICAL PARTIES.

1. Election of Washington; his inauguration date, and reason for change from date originally intended.
2. The cabinet—authority for and composition.
3. Hamilton's financial policy.
 - A. Reasons for.
 - B. Provisions.
 - C. Results.
4. Establishment of judiciary—authority for—composition of courts—jurisdiction.
5. Foreign affairs: Difficulties with—
 - A. Algiers.
 - B. Spain.
 - C. France. Was Washington's neutrality policy justifiable in view of French alliance during Revolution? Reasons for answer.
 - D. England.
6. Whisky insurrection: Cause—incidents—results.
7. Invention of the cotton gin; effects.

8. Development of parties—the United States bank—“strict construction” and “loose construction.”
9. Election of 1796.
10. Other events.

ADMINISTRATION OF JOHN ADAMS: THE LAST OF THE FEDERALISTS.

1. The X. Y. Z. affair.
2. The alien and sedition laws—to what extent justifiable, and to what extent dangerous.
3. The Virginia and Kentucky resolutions. (These should be carefully studied, as to their cause, the reasoning upon which they were based, and the logical results to which they led. And intimate connection of all three of the preceding topics should be clearly brought out.)
4. The eleventh amendment—reason for; case of Chisholm vs. Georgia; wisdom of.
5. Minor events.

THE PERIOD OF ANTI-FEDERALIST, OR DEMOCRATIC-REPUBLICAN, SUPREMACY.

1. Election of Jefferson by house of representatives.
 - A. Necessity for.
 - B. Incidents.
 - C. Results: twelfth amendment; on Burr; on Hamilton.
2. Louisiana purchase.
 - A. Why the United States wished to buy.
 - B. Why Napoleon was willing to sell.
 - C. The negotiations.
 - D. Constitutionality in view of Jefferson’s “strict construction” ideas.
 - E. What was Louisiana as purchased? (It should be noted here and referred to later that the Florida-purchase treaty of 1819, and the rallying cry of “the *re-annexation of Texas*” are intimately connected with this question.)
3. Lewis and Clark expedition.
 - A. Object.
 - B. Route.
 - C. Results.
4. Hamilton-Burr duel—causes, especially the election of President in 1800, and of governor of New York in 1804.
5. The Burr conspiracy; his trial; his later life.
6. The Cumberland road.
 - A. How built.
 - B. Route.
 - C. Results.
 1. Economic.
 2. Political.
7. Jefferson and our foreign relations.
 - A. Affairs in Europe—war between France and England.
 1. British orders in council.
 2. Berlin decree.
 3. Second orders in council.
 4. Milan decree.
 5. Effect of these on American commerce.
 6. Impression of American seamen; by whom; on what grounds.
 - B. Affairs in America: Jefferson’s peace-at-any-price policy.
 1. Nonimportation act.
 2. Embargo act.
 3. Nonintercourse act.

7. Jefferson and our foreign relations—*continued*.
 - B. Affairs in America: Jefferson's peace-at-any-price policy.
 4. Macon bill No. 2; Napoleon's duplicity. Why did United States not fight France instead of England, or France as well as England?
8. Election of Madison; his efforts to avoid war; their failure.
9. War of 1812.
 - A. Causes in addition to those given above.
 - B. Chief events.
 - C. Results: Did the treaty of peace specifically determine them all?
10. The Hartford convention not as "black as it was painted"; explain.
11. The Algerine war; cause; result.
12. The first real protective tariff, 1816.
13. The second United States bank; chartered by "strict constructionists"; why?
14. Election of Monroe.
15. The "Era of Good Feeling." What? Why so called?
 - A. The Seminole war; cause.
 1. Jackson's expedition.
 - a. Arbuthnot-Ambrister affair.
 - b. Result as to England; as to Spain. Was Jackson justifiable?
 2. Purchase of Florida.
 - B. The Missouri compromise; the first "alarm bell" in slavery agitation.
 - C. The Monroe doctrine. What is it?
 1. Aimed particularly at the Holy Alliance, and at Russia, for different reasons. What? And what part applied to each?
 2. Present status.
 - D. Protective tariff of 1824; changing attitude of North and South as represented by Webster and Calhoun, with reasons.
16. John Quincy Adams elected by the house of representatives. Why?
 - A. The cry of "corrupt bargain." Why? Was it justifiable?
 - B. The American system, or the system of internal improvements at government expense.
 - C. The beginning of the National Republican-Whig party.
 - D. The first railroads.
 - E. "The Tariff of Abominations."
17. The reign of Andrew Jackson.
 - A. Jackson, the man; a new type in the presidency.
 - B. The "Kitchen Cabinet." What? Why so called?
 - C. The spoils system. (In this connection investigate the Crawford tenure-of-office act of 1820, and reason for it.)
 - D. Financial affairs:
 1. Veto of the United States bank bill.
 2. Removal of deposits, and Jackson's "pet" banks.
 3. Distribution of surplus.
 4. Speculation, especially in government lands.
 5. The "Specie Circular."
 - E. Constitutional questions.
 1. The Webster-Hayne debate.
 2. The tariff of 1832.
 3. Nullification. (Compare Jackson's attitude on this question with his position in regard to decision of the supreme court in favor of the Indians in Georgia, and adverse to that state. In which case was he right and in which wrong?) Results.
 4. Compromise tariff of 1833.

17. The reign of Andrew Jackson—*continued.*
 - F. The *Liberator* established, 1831.
 - G. McCormick's reaper patented, 1834.
18. Van Buren becomes Jackson's political heir.
 - A. The panic of 1837 (for causes, see above).
 1. Events.
 - B. The subtreasury bill passed, 1840.

THE WHIGS TEMPORARILY SUCCESSFUL.

1. Election of Harrison and Tyler. (Tyler's previous political affiliation and the reason for his nomination by the Whigs, as well as the reason for his acceptance of the nomination, should be fully understood.)
 - A. Death of Harrison.
 - B. Tyler quarrels with Congress over bank bill.
 - C. Tariff of 1842 raises duties.
 - D. Webster-Ashburton treaty.
 - E. Dorr's rebellion.
 - F. Patroon war.
 - G. The magnetic telegraph.
 - H. The slavery question.
 1. The right of petition.
 2. Gag rule. What? Through whose efforts finally rescinded?
 3. Texas annexed. How? Why? What other territory has been annexed by *joint resolution*?

THE DEMOCRATIC PARTY RETURNS TO FULL POWER UNDER POLK.

1. Texas admitted as a state.
2. The Mexican war. (Investigate previous history of Mexico and Texas as to independence and status of slavery.)
 - A. Nominal causes. (Investigate basis and justice of cry "The *re*-annexation of Texas and *re*-occupation of Oregon"; also cause and outcome of cry of "Fifty-four Forty or Fight.")
 - B. Real cause.
 - C. Lincoln's "spot resolution"; its significance.
 - D. The Wilmot proviso.
 - E. Military events:
 1. Taylor's part in the war.
 2. Kearny's expedition.
 3. Fremont, Sloat and Stockton in California.
 4. Scott's campaign.
 - F. Treaty of Guadalupe-Hidalgo and results of the war.
3. Discovery of gold in California.
 - A. Results.
 1. On California.
 2. On rest of West.
 3. On slavery question.
4. Howe patents his sewing machine, 1846.

THE WHIGS WIN THEIR SECOND AND LAST VICTORY: TAYLOR AND FILLMORE.

1. The omnibus bill, or compromise of 1850.
 - A. Causes.
 - B. Provisions.
 - C. Results.
2. Clayton-Bulwer treaty. (Investigate relation to Hay-Pauncefote treaty and present Panama canal.)
 - A. Provisions.

THE DEMOCRATS AGAIN RETURN TO POWER, WITH PIERCE AS PRESIDENT.

1. Gadsden purchase.
2. Perry's expedition to Japan.
3. Ostend manifesto.
4. Kansas-Nebraska bill. (The intimate connection between the Mexican war, the discovery of gold in California, the compromise of 1850, and the Kansas-Nebraska act should be strongly emphasized, and the question as to whether the provision with reference to Utah and New Mexico was put into the compromise of 1850 as a "joker," to be used later in securing the repeal of the Missouri compromise, or whether it was simply used when the need arose, should be thoroughly investigated. See Burgess's *The Middle Period*, in *American History Series*.)

[Since whatever review of Kansas history normal-training students get will probably be in connection with their study of United States history and without the use of any additional textbook, the desirability of making that part of the outline dealing with the struggle for Kansas especially full is strongly felt. For that reason, Supt. J. O. Hall has been asked for, and has kindly given, his permission for the use of that part of his "*Outline of United States History*" touching upon this phase of the subject—the same being all of section 5 following.]

5. The struggle for Kansas.

- A. Preparations.

1. In the North: Emigrant aid companies.
 2. In the South: Emigrants from Missouri and Southern states.
 3. Leading men sent out.
 4. Towns founded:
 - a. By free-state people: Topeka, Lawrence.
 - b. By pro-slavery people: Lecompton, Atchison, Leavenworth.

- B. Beginning of the struggle.

1. A. H. Reeder appointed governor July 7, 1854.
 2. Pro-slavery delegate elected to Congress November 29, 1854. Missourians voted at this election. Result: Increased bitterness and great accession to free-state forces.
 3. Governor Reeder has census taken before calling election for members of legislature.
 4. Pro-slavery territorial legislature elected March 30, 1855. Many Missourians voted at this election. Governor set aside election in eight districts, and called new election there. At new election pro-slavery people refused to vote, and free-state candidates were given certificates of election.
 5. Legislature met at Pawnee at call of governor, July 2, 1855.
 - a. Its acts at Pawnee:
 1. Unseated all of free-state members elected at supplemental election called by governor, except one. Before legislature met one free-state member had refused to serve.
 2. Passed, over governor's veto, act to adjourn to Shawnee.
 - b. Its acts at Shawnee:
 1. Asked President to remove Governor Reeder.
 2. Passed Missouri slave code laws, and made it an offense to say or write anything against slavery.
 3. Located capital at Lecompton.
 4. Provided for a constitutional convention.
 5. Passed act entitled "An act to punish offenses against slave property."
 6. Reeder forced to leave the territory.

5. The struggle for Kansas—*continued.*

C. Topeka constitution, anti-slavery, October, 1855.

1. Convention called by free-state people, September, 1855.
This convention, which issued call for election, met in response to a call by an earlier political party convention at Big Springs. The general purpose of the free-state people was to avoid obeying acts of the Shawnee legislature, called "bogus legislature," and if possible secure admission as a free state.

2. Constitutional convention met at Topeka, October 23, 1855.
Composed entirely of free-state members.
3. Free-state constitution formed, submitted to the people, and ratified by them December 15, 1855. Only free-state people voted.
4. State election held, Robinson elected governor, other state officers and state legislature chosen, January 15, 1856.
5. Officers did not attempt to assume charge of the government, except that legislature met, but simply held themselves in readiness to take charge when Kansas should be admitted as a state under the constitution.
6. Constitution sent to Congress and opposed by President Pierce. Approved by house, disapproved by senate.
7. Topeka legislature dispersed by U. S. troops, July 4, 1856.

D. Lecompton constitution, pro-slavery, 1857-'58.

1. Convention met September 11, 1857, in pursuance of call by pro-slavery legislature. Composed entirely of pro-slavery members.
2. As the convention saw that the people were likely to disapprove of the constitution they decided to submit to vote only the clause regarding slavery, and so people voting on it had to vote:
 - a. For the constitution with slavery, or
 - b. For the constitution without slavery; thus voting for slavery in either case, for the constitution provided that slave property in the territory should not be interfered with.
3. On the face of the returns the constitution was almost unanimously approved, as only pro-slavery people voted.
4. While the convention was in session the free-state people had elected a majority of new legislature at election at which occurred the Oxford, or Cincinnati Street Directory, frauds.
5. Free-state people urged governor to call special session of the legislature, which he did.
6. New legislature submitted constitution to the people so they could vote for or against it, and it was voted down almost unanimously, only free-state people voting.
7. Constitution sent to Congress and approved by senate, but disapproved by house. By the terms of the English bill, a compromise measure, the constitution was referred back to the people of Kansas for approval or rejection.
8. Constitution then rejected by more than 11,000 in total of 13,000 votes, August 2, 1858.

E. Leavenworth constitution, anti-slavery, 1858.

1. Convention met first at Minneola, March 23, in pursuance of an act declared to have been passed over the governor's veto, but which was not. The convention adjourned to Leavenworth.

5. The struggle for Kansas—*continued*.
 - E. Leavenworth constitution, anti-slavery, 1858.
 2. General objects in view were:
 - a. Fight admission of Kansas under Lecompton constitution by showing Congress that people did not favor it.
 - b. Secure admission as a free state if possible.
 3. Submitted to and approved by people, free-state people voting, May 18, 1858.
 4. Sent to Congress but not approved by either house.
 5. Convention composed entirely of free-state members.
- F. Wyandotte constitution, anti-slavery, 1859-'61.
 1. Legislature submitted to people the question whether or not they wanted a constitutional convention, and the people said they did, March 28, 1859. Legislature soon called the convention.
 2. Convention met July 5, 1859. Members met as Republicans and Democrats, this being the first constitutional convention in Kansas in which more than one party was represented.
 3. Constitution ratified by the people, October 4, 1859.
 4. Robinson elected governor, and other state officers elected, December 6, 1859.
 5. Topeka made temporary seat of government.
 6. Constitution sent to Congress, but could not be approved in both houses till some of pro-slavery members withdrew on secession of Southern states.
 7. Congress approved the constitution, and the bill admitting Kansas as a state became a law January 29, 1861.
6. Buchanan's forecast of the Dred Scott decision.
7. The Dred Scott decision. (In connection with this and the preceding topic pupils should find Lincoln's story about "Franklin, Stephen, Roger and James," and explain its application. See Blaine's Twenty Years of Congress.)
 - A. History of the case.
 - B. Decision on case itself; decision on incidental points, or *obiter dicta*.
 - C. Results.
8. Panic of 1857.
9. The Lincoln-Douglas debates.
 - A. Why? Chief topics? What was Douglas's "Freeport doctrine"? What was its effect on him as a presidential possibility? Explain. (See Wilson's Division and Reunion, in Epochs of American History.)
 - B. Result as to Lincoln; explain.
10. John Brown; his raid, its purpose and result. (Especially read Burgess's The Civil War and the Constitution, in American History Series.)
11. The presidential campaign of 1860.

TWENTY-FOUR YEARS OF REPUBLICAN RULE.

[Here the origin and composition of the Republican party should be carefully considered. All the direct causes of secession, from the introduction of slavery, in 1619, should also be reviewed.]

1. The secession of the Southern states. (It should be emphasized that this was due to the election of Lincoln on a platform opposing the extension of slavery, and not because either Lincoln or the Republican party was committed to the abolition of slavery.)
2. The formation of the Confederate government.

3. Buchanan's attitude, and his reason for it. Was it sound?
4. Efforts at compromise; proposals, and results.
5. Comparison of the sections.
6. The war.
 - A. Military operations. (These operations should be studied as being almost wholly offensive on the part of the North and defensive on the part of the South. And the war should be considered from the view of the two general purposes of the North—that is, to push the Confederate line of defense south and to blockade Southern ports. The three great efforts to accomplish the first of these results were to capture Richmond, to open the Mississippi, and to penetrate the heart of the Confederacy and capture Atlanta as the great central supply depot; and the success of these efforts, together with the establishment of an effective blockade, finally wore and starved the South out. Dodge's *Bird's Eye View of the Civil War* is the best single volume on the subject.)
 - B. Finances.
 - C. The border states.
 - D. The emancipation proclamation; three reasons for it. (See Wilson's *Division and Reunion*, in *Epochs of American History*.)
 - E. Results.
7. Lincoln's assassination and Johnson's succession.
8. Lincoln's reconstruction policy so far as developed.
9. Johnson's reconstruction policy; compare with Lincoln's as to liberality; cause of hostility of Congress.
10. Congressional reconstruction policy. Why did Congress have a constitutional advantage in the contest? What was the real status of the seceded states? Were they readmitted, or how did they get back into their former relationship?
11. Impeachment, trial and acquittal of Johnson.
12. The thirteenth amendment, 1865.
13. The Atlantic cable, 1866.
14. The purchase of Alaska, 1867.
15. Fourteenth amendment, 1868; compare with civil rights bill. Why was latter not considered sufficient?
16. Grant's elevation to the presidency.
17. The fifteenth amendment, 1870. What states had to ratify in order to resume former place in the Union?
18. Negro suffrage and "carpetbag government." (Should the negroes have been given the right of unrestricted suffrage?)
19. The Ku-Klux Klan.
20. The force bills, and use of United States courts and United States army of the South.
21. Troubles with England, and their arbitration.
 - A. Alabama claims.
 - B. Fisheries question.
 - C. Northwestern boundary dispute.
22. Temporary civil service reform. (Why only temporary?)
23. The panic of 1873.
24. Demonetization of the silver dollar, 1873. Why? Why afterwards called the "Crime of '73"? Is silver dollar coined now? What is the present legal standard of value?

25. Resumption of "specie payment"; meaning; purpose; result. (In this connection the two contradictory decisions of the supreme court with reference to the legal-tender qualities of "green-backs" should be investigated; the reason for the reversal of opinion, as well as the present status of the various kinds of paper money, should be understood.)
26. The "Credit Mobilier." (Show connection between this and the Liberal Republican movement.)
27. The "salary grab" act. (Compare its reception by the public with that of the recent increase in congressional salaries, and explain reasons for difference.)
28. The "whisky ring."
29. Indian troubles, and the killing of Generals Canby and Custer.
30. The only disputed presidential election in our history. (Pupils should see clearly and be able to explain just why the Hayes-Tilden contest did not go to the house of representatives for settlement.)
 - A. The cause of the dispute.
 - B. The Electoral Commission.
 1. How composed. (It should be clearly shown just how it came about that there were eight Republicans and seven Democrats.)
 2. Its duties.
 3. Its decision.
31. Withdrawal of Federal troops from the Southern states. (Was there an understanding between Hayes and the Democratic leaders that if allowed peaceably to take his seat he would withdraw the troops? As a matter of public policy, was their withdrawal wise?)
32. The Bland-Allison act.
 - A. Reasons for.
 - B. Provisions.
 - C. Why vetoed by President. Was his action final?
33. Results of actual resumption of specie payment.
34. The election of Garfield and Arthur.
35. Strife within the party; stalwarts vs. half-breeds; Blaine vs. Conkling; resignation of Conkling and Platt, and result.
36. Assassination of Garfield.
37. The Pendleton civil-service-reform act. (Here the history of the "spoils system," and of attempts at civil-service reform, should be reviewed, and pupils should note the connection between the spoils system and the assassination of Garfield, and between his death and the Pendleton act.)
38. The Chinese-exclusion act.
 - A. Reasons for.
 - B. Provisions.
 - C. Present status.
39. The Edmunds anti-polygamy act.
 - A. Purpose.
 - B. Later anti-polygamy legislation.
 - C. Present status of polygamy.

THE DEMOCRATS WIN THEIR FIRST PRESIDENTIAL ELECTION SINCE THE WAR.

1. Cleveland elected President; tariff the main issue, but personality of candidates an important factor in campaign.
2. The presidential-succession law.
 - A. Two reasons for.
 - B. Provisions.

3. Electoral-count act.
 - A. Reasons for.
 - B. Provisions.
4. Interstate-commerce act, 1887. (In this connection study should be made of "railroad rate" and "pure food" laws of the Roosevelt administration, and of the railroad bill of the Taft administration. From this point on Hall's Outlines and the annual volumes of the World Almanac, particularly the more recent ones, together with current-event magazines, will be found especially valuable.)
5. The Mills tariff bill.
 - A. Character.
 - B. Why it failed to become a law.
6. Cleveland's use of the veto power.
7. More anti-Chinese legislation.
8. The anarchists, and the Haymarket massacre.

THE REPUBLICANS ELECT HARRISON, BUT AS A MINORITY PRESIDENT.

[Pupils should be able to explain how this is legally possible.]

1. The Reed rules in the house of representatives.
 - A. Reason for.
 - B. Provisions.
 - C. Compare with present rules. (Discuss recent changes.)
2. The McKinley bill, providing for the highest tariff in our history, free sugar, reciprocity.
3. The Sherman silver act, 1890.
 - A. Reasons for.
 - B. Provisions.
4. Sherman antitrust act, 1890; its purpose and provisions.
5. Mafia troubles in New Orleans. (This should be compared with the Caroline affair in Tyler's administration and the Japanese school troubles in California in Roosevelt's administration. The serious and embarrassing position in which such difficulties place the national government, and the reason therefor, should be fully understood by the pupils. For discussion of this subject, see President Taft's first message to Congress.)
6. Growing use of the "Australian ballot," and advantages.
7. Original-package law.

CLEVELAND IS THE DEMOCRATIC PRESIDENTIAL CANDIDATE FOR THE
THIRD TIME AND IS ELECTED.

1. Panic of 1893.
2. Repeal of purchasing clause of Sherman silver act.
3. Our relations with Hawaii.
 - A. Under Harrison's administration.
 - B. Under Cleveland's administration.
4. Trouble between Venezuela and Great Britain.
 - A. Cause.
 - B. The Monroe Doctrine and position of United States.
 1. Attitude of England.
 - C. Final arbitration.
5. The Pullman strike and resulting sympathetic strikes.
 - A. Events.
 - B. Attitude of President^t

6. The Wilson tariff bill.
 - A. Material reduction of duties.
 - B. Income tax provision.
 1. Limit and levy.
 2. What afterwards happened to it?
 3. What movement now on foot with reference to an income tax?
 - C. Enlarged free list.
 - D. Final action of President, and reason for it.
7. The campaign of 1896.
 - A. "The free coinage of silver at the ratio of 16 to 1" the "paramount" issue. (Pupils should understand clearly the meaning of this issue, and should in connection with it review previous silver legislation.)
 1. Arguments for.
 2. Arguments against.
 - B. Incidents.
 - C. The result.

REPUBLICANS IN COMPLETE CONTROL, WITH M'KINLEY AS PRESIDENT.

1. The Dingley tariff bill.
 - A. General provisions.
 - B. Reciprocity.
 1. Attitude of President.
 2. Attitude of senate.
2. Spanish-American war. (History of previous relations of Spain, Cuba and United States should be here reviewed—Ostend manifesto, Virginius affair, Ten Years' war, etc.)
 - A. Causes.
 - B. Events.
 - C. Results.
 - D. Government of our new possessions.
3. Annexation of Hawaii.
4. The gold-standard act, 1900.
 - A. The standard of value.
 - B. Changes in the national banking law.
5. Reëlection and assassination of McKinley.
6. Succession of Roosevelt.
7. Establishment of Department of Commerce and Labor.
8. Railroad-rate law.
9. Pure-food-and-drugs act.
10. Service-pension law.
11. Law limiting working hours of railroad employees.
12. The Panama canal. (Previous history of the project should be reviewed.)
 - A. The Clayton-Bulwer treaty.
 - B. The Hay-Pauncefote treaty.
 - C. The Hay-Herran treaty.
 - D. Independence of Panama and Hay-Varilla treaty.
 - E. Plans and progress of the work.
13. Temporary intervention in Cuba.
 - A. Cause.
 - B. Result.
14. Trust prosecutions.
15. Admission of Oklahoma.
16. The insurance and other "grafters."
17. Panic of 1907.

18. The Hague conference. (Movements toward international arbitration should be reviewed.)
19. Taft elected President.
20. The Aldrich-Payne tariff revision bill passed by special session of Congress.
 - A. Its provisions and their reception by the public.
21. The railway regulation act.
22. The postal savings bank law.
23. Bills for admission of Arizona and New Mexico.
24. The elections of 1910 and their general result.
25. Second regular session of sixty-first Congress.
 - A. The question of direct election of senators.
 - B. The Lorimer case.
 - C. Canadian reciprocity.
 - D. Other measures.
26. Sessions of the sixty-second Congress.
 - A. Democrats control the house and elect Champ Clark speaker.
 - B. Senate so divided among Democrats, Regular Republicans, and Insurgent Republicans that there is no working party majority, though the Republicans nominally control.
 - C. The direct election of senators.
 - D. The Lorimer case reopened.
 - E. Canadian reciprocity.
 - F. Statehood for Arizona and New Mexico.
 - G. "The farmer's free list," and other tariff bills.
27. The conservation movement.
28. Decision of the supreme court in the Standard Oil and Tobacco Trust cases.
29. Status of international arbitration and the universal peace movement.
30. The revolution in Mexico.

THE DEMOCRATS MAKE A CLEAN SWEEP.

1. Renomination of President Taft at Chicago convention, and split resulting.
2. The Democratic national convention at Baltimore, and nomination of Woodrow Wilson.
3. Organization of Progressive party, and nomination of Roosevelt.
4. The campaign of 1912 and results.
5. Parcel post.
6. Sixteenth and seventeenth amendments.
7. Inauguration of President Wilson; his cabinet.
8. Special session of sixty-third Congress, with Democrats in control of both branches.
9. The Underwood tariff law; purpose, effects.
10. Currency legislation; character, purpose.
11. The antitrust program.
12. Trouble with Mexico.
13. Completion of Panama canal.
14. Panama-Pacific exposition.

After the work as here outlined has been covered the whole should be fixed, and a clearer idea of its unity be obtained, by a general review. And so far as possible this should be done by the topic method. As examples of subjects that may be thus treated the following may be mentioned:

- The evolution of the constitution.
- The origin and growth of political parties.
- Territorial expansion.
- Tariff legislation.
- The slavery question.
- Nullification and secession.
- Our financial system.

Each topic should be taken up from its first appearance in our history and traced to its end or to the present time, without the intervention of any except directly related subjects, and connections should be strongly emphasized.

As an illustration of how this may be done the following outline on the slavery question is given:

1. Slavery introduced, 1619.
2. Slavery in every colony, 1776.
3. First states to abolish slavery. What? Why?
4. Slavery in the constitution.
5. Invention of the cotton gin, 1793.
6. Legislation on slave trade, 1808, 1820.
7. Missouri compromise, 1820.
8. The *Liberator*, 1831.
9. Abolition societies.
10. Nat Turner's insurrection.
11. "Gag Rule."
12. The annexation of Texas.
13. The Mexican war.
14. The Wilmot proviso.
15. The "omnibus" bill or compromise of 1850.
16. The underground railroad.
17. The Kansas-Nebraska act.
18. Anti-slavery parties.
 - A. Abolition.
 - B. Liberty.
 - C. Free soil.
 - D. Republican.
19. "Uncle Tom's Cabin" and "The Impending Crisis."
20. The Dred Scott decision.
21. Lincoln-Douglas debates.
22. Lincoln elected President.
23. Secession of Southern states—war.
24. The emancipation proclamation.
25. Thirteenth, fourteenth, and fifteenth amendments.

CIVICS.

Interpretation comes through analysis, and to that end an outline is valuable. The study of civics should mean more than a knowledge of the separate parts of the constitution; it should include an appreciation of the structure and nature of the document from which is drawn the great principles of democracy, and a knowledge of its actual application in practice. Three main questions should be before the student and applied to each article, section and clause: First, What does it say? Second, What does it mean? Third, Explain its use, past and present.

Any text on civil government will be of some help. In addition to the approved texts, the outline is drawn from Ashley, "American Government," new and revised edition, The Macmillan Co., Chicago; Forman, "Advanced Civics," The Century Co., New York; Rush, "Constitution in Outline, with Questions and Answers," E. E. Rush, Kansas City, Mo.

SELF-GOVERNMENT.

"He that ruleth his spirit is better than he that taketh a city."—BIBLE.

- I. Self-control.
 1. The will directs action.
 2. A choice of right or wrong must be made.
- II. Self-control can be cultivated.
- III. The reward of doing right.
- IV. Self-government the foundation of all government.
- V. Name a fault opposed to each of the following virtues: Courage, industry, cheerfulness, liberality, tolerance.
- VI. Arrange the following in the order of their importance: Honesty, modesty, patience, reverence, truthfulness, liberality.
- VII. Arrange the following faults, placing the one you dislike most first: stubbornness, cruelty, jealousy, anger, tardiness, hypocrisy.

FIRST DIVISION.—*History and Explanation.*

I. GOVERNMENT.

1. Basis.
 - a. Theoretical.
 - b. Actual.
2. Characteristic feature.
3. Definition.
4. Conclusion: Government can not be forced by theory; it is a growth of man's social nature, and we find it changing as his conditions change.

II. CIVIL GOVERNMENT.

1. Its origin.
 - a. In northern Germany.
 - b. In England.

2. Its growth in America.
 - a. Transplanted from England.
 - b. In the colonies.
 - c. In the States.
 - d. In the Nation.
 - e. The purpose.
 - f. Definition.
3. Conclusion: When civil government is properly organized and administered it produces wholesome laws and mutual advantages for those who come under its rule.

III. FORMS OF CIVIL GOVERNMENT.

A.—As to time:

1. Ancient.
 - a. Monarchy (the rule of one).
 - b. Aristocracy (the rule of a few).
 - c. Democracy (the rule of many).
2. Modern.
 - a. As to power.
 1. Federated.
 - a. States banded for mutual protection, each state retaining its original power.
 - b. Banded States.—States united to form a stronger government, each state yielding a portion of its original power to the general government.
 2. Centralized: each state yielding all authority to the central government.
 - b. As to operation.
 1. Pure democracy (local).
 2. Representative democracy (local and national).

B.—As to expression:

1. Unwritten.
 - a. Disadvantages.
 - b. Advantages.
2. Written.
 - a. Disadvantages.
 - b. Advantages.

C.—Conclusion.

That form of government is the best under which a people attain the highest happiness and usefulness in the arts of a Christian civilization.

IV. THE GROWTH OF GOVERNMENT FROM THE EARLY COLONIAL TIMES TO 1789.

1. Claims of European nations in America.
 - a. Spain.
 - b. France.
 - c. England.
2. Supremacy of England in 1763.
 - a. Determined the dominant race for America.
 - b. Determined the dominant religion for America.
 - c. Determined the dominant government for America.
3. England established government in America.
 - a. Chartered government.
 1. Its origin.
 2. Its nature.
 - b. Proprietary government.
 1. Its origin.
 2. Its nature.
 - c. Royal province government.
 1. Its origin.
 2. Its nature.

4. Revolutionary states organized government.
 - a. The state constitution.
 1. A written document.
 2. Defines the limits of authority.
 3. Distributes the authority.
 - a. To the legislative.
 - b. To the executive.
 - c. To the judicial.
 - b. The local units.
 1. The county.
 2. The township.
 3. The school district.
 - c. The articles of confederation.

THESE ARTICLES WERE NOT SUITABLE FOR A STRONG GOVERNMENT.

1. Defective in organization.
 - a. Legislative.
 1. Term too short.
 2. Service limited.
 3. State could recall.
 4. Salary paid by the state.
 5. Had no authority over commerce.
2. Defective in operation because no power to punish individuals.
 - a. Taxation—no power to collect.
 - b. Armies and navies—no direct powers.
 - c. Could not enforce—simply advise.
3. Conclusion: The articles of confederation was a form of law which the states were supposed to respect and obey.
5. The United States of America established the present constitution in 1789.

THIS CONSTITUTION IS SUITABLE FOR A STRONG GOVERNMENT.

1. Power in organization.
 - a. Legislative.
 1. Length of term reasonable.
 2. Service unlimited.
 3. Membership beyond recall.
 4. Salary paid from United States treasury.
 - b. Executive—with constitutional powers.
 1. Civil.
 2. Military.
 - c. Judicial—with highest legal powers.
2. Power in the operation of government.
 - a. Taxation—can collect.
 - b. Army and navy—can create.
 - c. Execute the laws.
3. Conclusion: The constitution of the United States is an instrument of law, operative upon the several states and the people within the states collectively and individually.

V. DEFINITIONS AND GENERAL PRINCIPLES.

1. Define state; sovereign state; dependent state.
2. Define United States constitution; state constitution.
3. Elements of weakness.
 - a. In a written constitution.
 - b. In an unwritten constitution.
4. When does the right of revolution exist?
5. The constitution: How framed? How ratified?

6. Compare the articles of confederation and the present constitution.
 - a. In organization.
 - b. In operative powers.
7. What is the supreme law? (Art. VI: 2.)
8. Twelve important events in the growth of American government from 1763 to 1789.
 - a. The treaty of Paris, 1763.
 - b. The stamp-act congress, 1765.
 - c. The first continental congress, 1774.
 - d. The second continental congress, 1775.
 - e. The declaration of independence, 1776.
 - f. The battle of Saratoga, 1777.
 - g. The articles of confederation, 1781.
 - h. The peace of Paris, 1783.
 - i. The Alexandria convention, 1785.
 - j. The Annapolis convention, 1786.
 - k. The Philadelphia convention, 1787.
 - l. The present constitution, 1789.

SECOND DIVISION—*The Constitution in Outline.*

PREAMBLE.—Memorize.

I. ARTICLE I.—LEGISLATIVE POWER.

A.—*Organization of Congress.*

(When possible, all answers should be verified by article, section and clause of the constitution.)

1. House of representatives.
 - a. Composed of.
 - b. Elected by.
 - c. Qualifications.
 1. Age.
 2. Citizenship.
 3. Inhabitancy.
 - d. Fixing the ratio.
 - e. Representative at large.
 - f. Number.
 1. The maximum allowed.
 2. The minimum required.
 3. The actual number.
 - g. The salary and perquisites.
 - h. The term.
 - i. Vacancy.
 1. How created.
 2. How filled.
 - j. Officers.
 - k. Sole power.
 - l. The duty of a representative.
2. The senate.
 - a. Composed of.
 - b. Elected by.
 - c. Qualifications.
 1. Age.
 2. Citizenship.
 3. Inhabitancy.
 - d. The number.
 - e. Salary and perquisites.
 - f. The term.
 - g. Vacancy.
 1. How created.
 2. How filled.

2. The senate—*continued.*
 - h. The officers.
 - i. Sole power.
 - j. The duty of a senator.
3. Essential for self-preservation.
Each house decides—
 - a. Who are elected to membership.
 - b. The rules for its proceedings.
 - c. The punishment for disorder.
 - d. When to expel a member.
 - e. Who may be its officers, except as to the president of the senate.

B.—Congress: Its Powers, Prohibitions and Operation.

A. POWERS.

1. *To raise revenue.* (I:8:1.)
 - a. By taxation.
 1. Direct.
 - a. Capitation.
 - b. Land.
 - c. Personal property.
 2. Indirect.
 - a. Duties—specific, ad valorem.
 - b. Excises—specific, ad valorem.
 - b. By borrowing money. (I:8:2.)
 - c. Give a historical account of the following.
 1. First revenue bill, 1789.
 2. Protective tariff, 1816.
 3. Canadian reciprocity, 1911.
 4. In what way are these measures related to I:8:1?
2. *To regulate commerce.* (I:8:3.)
 - a. Interstate Commerce Commission.
 1. Its organization.
 2. Its powers.
 3. Its service.
 - b. Give historical account of the following:
 1. The embargo act, 1807.
 2. The nonintercourse act, 1809.
 3. Antitrust laws, 1890, and recent supreme court decisions thereon.
3. *To regulate naturalization.* (I:8:4.)
 - a. Citizenship.
 1. Constitutional definition. (Am. XIV:1.)
 2. The international rule.
 3. Classes.
 - a. Natural born.
 - b. Naturalized.
 - b. Plan to determine citizenship.

Persons answering "Yes" to any one of the following questions are citizens of the United States:

 1. Were you born in the United States?
 2. Have you taken out naturalization papers?
 3. Was your father an American citizen before you became of age?
 4. Were you a citizen of any territory annexed to the United States having a treaty clause providing for citizenship?
 5. Is your husband a citizen of the United States?
 6. Have you served one year in the regular army or navy and received an honorable discharge therefrom?

A. POWERS—continued.

3. *To regulate naturalization.* (I:8:4.)
 - c. Methods of naturalization.
 1. The five-year process.
 - a. The times required.
 - b. The evidence required.
 - c. Who issues the papers.
 2. The marriage process.
 3. By the annexing of territory.
 - a. When terms are stated.
 - b. When no mention is made concerning citizenship.
 4. The military process.
 5. The "renewal of domicile" process.
 - d. Important naturalization acts.
 1. The continental congress, 1776.
 2. Congress in 1790.
 3. Congress in 1795.
 4. Congress in 1798.
 5. Congress in 1802.
 6. Congress in 1882.
 - e. Why should an alien desire to become a citizen of the United States.
 4. *Bankruptcy.* (I:8:4.)
 - a. A bankrupt is one who has been declared by a court to be owing more than he can pay.
 - b. Purposes.
 1. Distribution of property.
 2. Discharge from present debts.
 - c. Kinds.
 1. Voluntary.
 2. Involuntary.
 5. *Money and coinage.* (I:8:5.)
 - a. United States money is a measure of value expressed in coin.
 - b. Money.
 1. Metal.
 - a. Gold—various denominations.
 - b. Silver—various denominations.
 - c. Nickel.
 - d. Copper.
 - e. Locate the mints.
 2. Paper.
 - a. Gold certificates.
 - b. Silver certificates.
 - c. United States notes.
 - d. Treasury notes.
 - e. National bank notes.
 - f. What gives value to each of these several issues?
 6. *Counterfeiting.* (I:8:6.)
 - a. Consists in—
 1. Manufacture.
 2. Circulation; or having in possession, with intent to circulate, spurious coins or securities.
 - b. Penalties.
 1. Fine.
 2. Imprisonment.
 - c. What are securities?
 - d. What are current coins?
 - e. Will you include stamps and money orders in your definition?

A. POWERS—*continued.*

7. *Post offices.* (I:8:7.)
- a. Foreign mails.
 - 1. Carriage.
 - 2. Postage.
 - b. Domestic service.
 - 1. Presidential offices—those paying \$1000 or more.
 - 2. Minor offices—paying less than \$1000.
 - 3. Post roads—designated by Congress.
 - a. Wagon roads.
 - b. Waterways.
 - c. Railroads.
 - c. Postage.
 - 1. Principles.
 - a. Equal rights of all to use the mail service.
 - b. Secrecy of the mails.
 - c. Low postage.
 - d. Classes of mail.
 - First class: articles, rates of postage.
 - Second class: articles, rates of postage.
 - Third class: articles, rates of postage.
 - Parcel post or fourth class: articles, rates of postage.
 - e. Free delivery.
 - 1. In cities of 10,000 population or over.
 - 2. Where receipts are \$10,000 or over.
 - 3. In country communities where routes have been established.
 - f. Development in the service. Give historical sketch from 1782 to the present.
 - g. In what way are the following topics related to the post-office clause?
 - 1. The Cumberland road of 1807.
 - 2. International Postal Union of 1891.
 - 3. Ownership of telegraph lines in 1866.
8. *Patents and copyrights.* (I:8:8.)
- a. Purpose of the clause.
 - b. How is the purpose promoted?
 - c. Patent.
 - 1. How obtained.
 - a. Make oath that he is the inventor.
 - b. Submit descriptions and drawings.
 - c. The article must be new, unused and useful.
 - 2. Expense.
 - a. A fee of \$15 must be sent with the application.
 - b. An additional fee of \$20 must be paid when patent is granted.
 - 3. Results.
 - a. Sole right to make and sell.
 - b. Good for how long?
 - 4. Principles.
 - a. Fee is small.
 - b. Patents recorded for comparison.
 - c. Patents are for a brief term.
 - d. Exclusive right to use and sell.

A. POWERS—*continued.*

8. *Patents and copyrights.* (I:8:8.)
 - d. Copyright.
 1. How obtained.
 - a. Give name of author.
 - b. Copy sent to librarian of Congress.
 - c. Publication must bear the date of copyright issued.
 2. Benefits secured.
 - a. Exclusive rights to publish—for how long?
 - b. At home and in some foreign countries.
 9. *The war powers.* (I:8:10-16.)
 - a. Suppress piracy.
 - b. Declare war.
 - c. To raise and support armies.
 - d. To provide and maintain a navy.
 - e. Regulation of the army and navy.
 - f. Calling forth the militia.
 - g. Organizing and disciplining.
 10. *The property clause.* (I:8:17.)
 - a. Where have our national congresses held sessions—temporary and permanent capitals.
 - b. Exclusive legislation over what?
 11. *The elastic clause.* (I:8:18.)
 - a. This clause gives rise to what two constitutional constructions?
 - b. Apply the meaning of this clause to the following:
 1. The first United States bank, 1791.
 2. The embargo act, 1807.
 3. Purchase of Louisiana, 1803.
 4. Protective tariff of 1816.
 5. The Philippines acquired, 1898.

B. PROHIBITIONS.

In an effort to protect the rights and liberties of the people, the constitution prescribes some prohibitions—

1. *On Congress.* (I:9.)
 - a. Absolute.
 1. No bill of attainder shall be passed.
 2. No *ex post facto* law shall be passed.
 3. No tax shall be laid on exports from any state.
 4. No preference to certain ports.
 5. Vessels from state to state shall not be taxed.
 6. No title of nobility shall be granted by the United States.
 - b. Conditional.
 1. Clause of article I, section 9, limited in time and taxation, but is now obsolete.
 2. Writ of habeas corpus conditioned on public safety.
 3. Capitation or other direct tax conditioned on I:2:3.
 4. Withdrawal of money—by appropriation bills.
 5. Titles of nobility.
2. *On States.* (I:10.)
 - a. Absolute: A state is forbidden—
 1. To make a treaty.
 2. To make an alliance.
 3. To form a confederation.
 4. To grant letters of marque.

B. PROHIBITIONS—*continued.*2. *On States.* (I:10.)

- a. Absolute: A state is forbidden—
 - 5. To coin money.
 - 6. To emit bills of credit.
 - 7. To make anything but gold and silver tender in payment of debts.
 - 8. To pass any bill of attainder.
 - 9. To pass an *ex post facto* law.
 - 10. To pass a law impairing the obligation of a contract.
 - 11. To grant titles of nobility.
- b. Conditional.
 - 1. Import duties.
 - 2. Export duties—both conditioned on necessity and subject to revision by Congress.
 - 3. To keep troops.
 - 4. War supplies.
 - 5. To make agreements with other states.
 - 6. To engage in war.
 - 7. To make agreements with foreign nations.

All conditioned on emergency and consent of Congress.

C. OPERATION.

1. *Plan for law-making.* (I:7.)

- a. A bill is a proposed law.
- b. All bills for raising revenue shall originate in the house of representatives.
- c. Before any bill becomes a law it shall be approved by any one of the following methods:
 - 1. a. Passed by majority in each house.
 - b. Signed by the President.
 - 2. a. Passed by majority in each house.
 - b. Vetoed by the President.
 - c. Repassed by two-thirds majority in each house.
 - 3. a. Passed by majority in each house.
 - b. Not signed or returned in ten days, Sundays excepted, unless Congress adjourns before the ten days expire.

2. *The committee system.*

- a. Appointments.
- b. Methods.
 - 1. Logrolling.
 - 2. Filibustering.
 - 3. Pairing.
- c. Advantages.
- d. Disadvantages.
- e. Discuss the possibility of maintaining our present form of government without the committee system.

II. ARTICLE II.—EXECUTIVE DEPARTMENT.

Vested Power. (II:1:1.)

THE EXECUTIVE POWER SHALL BE VESTED—

- A. In a President of the United States.
 - 1. For a term of four years.
- B. Election of President and Vice President.
 - 1. The college method. (II:1:2.)
 - a. Election of electors: how? when?
 - b. Number of electors.
 - c. Who may not be an elector.

B. Election of President and Vice President—*continued.*

1. The college method. (II:1:2.)
 - d. Duty of electors. (Am. XII.)
 1. Meet: where? when?
 2. Vote: how? for whom?
 3. Lists: how made? how disposed of?
 - e. President of the Senate.
 1. The opening of the lists.
 2. The counting.
 3. The result.
2. The house-and-senate method. (Am. XII.)
 - a. President.
 1. Chosen by.
 2. Candidates: how many?
 3. Voting.
 4. State power.
 5. Quorum.
 6. Necessary to a choice.
 - b. Vice President.
 1. Chosen by.
 2. Candidates: how many?
 3. Voting.
 4. State power.
 5. Quorum.
 6. Necessary to a choice.

C. Qualifications for the President. (II:1:4.)

1. Age.
2. Citizenship.
3. Inhabitancy.
4. Am. XIV.
 - a. Not holding any other office.
 - b. Not guilty of disloyalty.

D. Vacancy: created by—

1. Expiration of term.
2. Death.
3. Temporary inability.
4. Impeachment and conviction of—
 - a. Bribery, treason, misdemeanors.

E. Vacancy filled by—

1. Election.
2. Vice President.
3. Cabinet. (See succession law.)

F. Salary.

1. Constitutional provision.
2. The law.

G. Oath of office. (II:1:7.)

H. Powers.

1. Military. (II:2:1.)
2. Civil. (II:2 and 3.)
 - a. Legislative.
 1. Send messages to Congress.
 2. Sign or veto bills.
 3. Call extra session of Congress.
 4. Adjourn Congress when the Houses fail to agree to adjourn.
 - b. Executive.
 1. Sole powers.
 - a. Commander-in-chief of army and navy.
 - b. Demand reports.
 - c. Appointment to some inferior offices.

H. POWERS—*continued.*

- 2. Civil. (II:2 and 3.)
 - b. Executive.

- 2. Shared powers.

- a. To make treaties.
 - b. To appoint—
 - 1. Diplomats.
 - 2. Judges.
 - 3. Some civil service.

- c. Judicial power.

- 1. Pardon.
 - 2. Amnesty.
 - 3. Reprieve.
 - 4. Commutation.
 - 5. Parole.

I. Duties.

- 1. The President at all times must himself be governed by law.
- 2. He must execute the laws.

What two means to that end has he at his command?

- 3. Recommend measures to Congress.
- 4. Receive foreign representatives.

The cabinet is a strong arm of the executive, yet it rests upon narrow constitutional grounds. (II:2.) The work of the cabinet is sufficiently set forth in Boynton, ch. XII.

III. ARTICLE III.—THE JUDICIAL DEPARTMENT.

A. Organization. (III:1:1.)

- 1. One supreme court.
- 2. Inferior courts.

B. Appointment of judges.

- 1. By President with consent of Senate.
- 2. During good behavior.

C. Salary.

- 1. Constitutional statement.
- 2. Present amount.

D. The courts.

- a. Regular.

- 1. Supreme.

- a. Time of meeting.
 - b. Number of judges.
 - c. Original jurisdiction.
 - d. Appellate jurisdiction.

- 2. Appellate courts.

- a. The number of courts.
 - b. Held by what judges.
 - c. Purpose of the court.
 - d. Its jurisdiction.

- 3. District courts.

- a. The present number.
 - b. A district is either a state or a part of a state.
 - c. Its jurisdiction.
 - d. Cases, where brought.

- b. Irregular.

- 1. Court of claims.

- a. Where held.
 - b. Judges.
 - c. Purpose of the court.

D. *The courts—continued.*

b. Irregular.

2. District of Columbia court.
 - a. Judges.
 - b. Jurisdiction of the court.
3. Territorial courts.
 - a. Where established.
 - b. Judges—tenure of office.
 - c. Jurisdiction of the court.
4. Consular courts.

The judicial duty of a consul may be to hold court for any one of the following reasons:

 - a. To examine for crime committed on the high seas.
 - b. To hear complaints of seamen.
 - c. To reclaim deserters.
 - d. To extend relief to destitute seamen.
 - e. To probate bills.
 - f. To conduct a trial in half-civilized countries when an American citizen is party to the suit.

IV. ARTICLE IV.—THE RELATION OF STATES.

- A. To each other.
 - a. Analyze the "full faith and credit" clause.
- B. To the citizens.
 - a. Privileges.
 - b. Immunities.
- C. To territory.
 - a. Control.
 - b. Admit to statehood.
 1. Methods.
 - a. Discover three processes.
 2. What states have been admitted.
- D. Historical topics.

In what way are the following related to the general subject?

 - a. The Missouri compromise, 1820.
 - b. The compromise of 1850.
 - c. The Kansas-Nebraska act, 1854.
 - d. The Dred Scott case, 1857.
- E. The preamble sets forth the purposes of the constitution; why was article IV written?

V. ARTICLE V.—AMENDMENTS.

A. How secured.

First method:

1. Proposed by two-thirds vote of each house of Congress.
2. Ratified by legislatures of three-fourths of the several states.

Second method:

1. Proposed by two-thirds vote of each house of Congress.
2. Ratified by conventions in three-fourths of the several states.

Third method:

1. Proposed by a convention called by Congress.
2. Ratified by the legislatures of three-fourths of the several states.

All amendments so far have been secured by the first method.

B. Amendments adopted.

The first ten, 1791: Personal rights.

The eleventh, 1798: Citizens can not sue a state.

The twelfth, 1804: Changed method of electing president.

B. Amendments adopted—*continued.*

- The thirteenth, 1865: Freed the slaves.
- The fourteenth, 1868: Defines citizenship.
- The fifteenth, 1870: Protects the right to vote.
- The sixteenth, 1913: Income tax.
- The seventeenth, 1913: Election of United States senators by the people.

C. Amendments prohibited.

- 1. Absolute.
 - a. Before 1808. (I:9:1.)
 - b. Method of direct tax. (I:9:1.)
- 2. Conditional.
 - a. Affecting the equal rights of a state. (I:3:1.)

VI. ARTICLE VI.—NATIONAL INTEGRITY AND LAW.

A. National debts.

All debts contracted and engagements entered into before the adoption of this constitution shall be as valid against the United States under this constitution as under the confederation.

B. Supreme law.

- a. This constitution.
- b. The laws of the United States.
- c. Treaties made from 1789 to the present.

C. Persons under oath to support the constitution.

- a. Those who make the law.
- b. Those who enforce the law.
- c. Those who interpret and apply the law.

VII. ARTICLE VII.—RATIFICATION.

A. Conditions:

The ratification of the conventions of nine states shall be sufficient for the establishment of this constitution between the states so ratifying.

B. Questions.

- a. Over how many states was the constitution to be binding?
- b. What original state did not help write the constitution?
- c. When did this constitution go into full operation?

THE STATE CONSTITUTION.

1. Definition:

The state constitution is a written instrument defining the powers of the state and distributing those powers to the various branches and departments thereof.

2. Branches.

A. *Legislative.*

- a. House of representatives.
 - 1. Apportionment: how obtained?
 - 2. Members: number, term, chosen, qualifications.
 - 3. Districts.
 - 4. Officers of the house.
- b. Senate.
 - 1. Apportionment: how obtained?
 - 2. Members: number, term, chosen, qualifications.
 - 3. Districts.
 - 4. Officers of the senate.
- c. Sessions: time, number, quorum, adjournment.
- d. Duties and powers: journal, voting, salary.
- e. Law-making: define a bill, a law; give the form of the enacting clause; readings, veto, publication.
- f. Locate on a map your congressional district; your state representative district; your state senatorial district.

2. Branches—*continued.*B. *Executive.*

1. Make a list of seven executive officers.
2. Qualifications required.
3. Administrative officers and boards: their duties.
 - a. Railroad Commissioners.
 - b. State Board of Education.
 - c. Board of Agriculture.
 - d. Board of Equalization.
 - e. Board of Administration of Educational Institutions.
 - f. Board of Control.
4. The election, term and duties of officers in the following:
 - a. The county.
 - b. The township.
 - c. The city.
 - d. The school district.

C. *Judicial.*

1. Supreme court.
 - a. Judges: election, tenure, qualification, salary.
 - b. Jurisdiction, terms of court.
2. District courts: how organized, number, election of judges, salary, term.
3. Probate courts: number, election of judges, qualification, salary, term, jurisdiction.
4. Justice of the peace courts: number, election, term, salary, jurisdiction.
5. City courts: created by what authority? number, term, election, salary, jurisdiction.
6. Explain—
 - a. Difference between civil and criminal case.
 - b. Between damage case and an injunction case.
 - c. Between grand jury and petit jury.

HYGIENIC PHYSIOLOGY.

To promote the physical welfare of the child is the principal aim in the teaching of school physiology. This includes a knowledge of conditions favorable to growth and conducive to health and bodily vigor. Hygiene and sanitation treat of these facts.

To teach the structure and functions of the body without hygiene and sanitation is to miss the highest value of the subject, whatever other values may be realized. On the other hand, to teach hygiene and sanitation without the elements of anatomy and physiology is to build on the sand, with no scientific basis. Let this foundation, then, be adequate to an intelligent understanding of hygiene, but do not give all of the time and effort of the class to laying the foundation.

Properly taught, school physiology is one of the most practical of utilitarian subjects, in that it teaches people how to safeguard health, the most valuable economic asset they possess. Health means power to work with body and mind, economy in cost of living, longevity and enjoyment.

The true scientific spirit should pervade the teaching of school physiology; it should be related to the everyday activities and conditions of life that affect health, and should be made concrete and personal. Moreover, the teaching of hygienic facts is not sufficient, for these facts must be transformed into hygienic actions, and hygienic actions into hygienic habits.

The following outline is, with some modifications, based upon Conn and Budington's Advanced Physiology and Hygiene. Hough and Sedgwick's The Human Mechanism, Ginn & Co., Chicago, has also been frequently consulted. The high-school library should contain the latest editions of Walter's Physiology, Fitz's Physiology and Hygiene, Martin's Human Body, Wilson's The Cell in Development and Inheritance, Davison's Human Body and Health, Bergey's Principles of Hygiene, Ritchie's Primer of Sanitation, and Hough and Sedgwick's The Human Mechanism, as reference books for pupils and teacher. Bulletins of State Board of Health will be sent regularly on request to the secretary. The teacher's library should include Gray's Anatomy and Hall's Textbook of Physiology, Normal and Pathological, or similar new advanced textbooks.

Every student of the normal-training course in physiology should keep a notebook embodying the essentials of this subject, including suggestive notes, outlines, diagrams, and rec-

ords of demonstrations and experiments. Outlines in Physiology, by Prof. C. H. Nowlin, Kansas City, Mo., will be found helpful in this connection.

I. LIVING MATERIAL OF THE BODY.

(See Conn and Budington, ch. I.)

1. Definition of terms.
 - A. Physiology.
 - B. Human physiology.
 - C. Anatomy.
 - D. Histology.
 - E. Hygiene.
 - F. Organism.
 - G. Organ.
 - H. Function.
 - I. Tissue.
2. Cells: the units of work and of structure.
 - A. Kinds of cells.
 - B. Structure of cells.
 - C. Description of protoplasm.
 - D. Activities of cells.
 1. Growth and repair.
 2. Division.
 3. Motion.
3. Unicellular and multicellular animals.
 - A. Division of labor.
 - B. Supreme importance of cells in the work of the body.

II. NUTRIENTS OR FOODSTUFFS.

(Conn and Budington, ch. II, III; Hall, ch. V.)

1. Terms to be understood: chemical elements; chemical compounds; foods; nutrients; condiments; solutions; emulsions.
2. Foods classified. (See Martin's Human Body.)
 - A. Proteids: examples and uses.
 - B. Carbohydrates: examples and uses.
 - C. Fats: examples and uses.
 - D. Inorganic salts and water.
3. Food values.
 1. Tables. (See Bulletin Kansas State Board of Health, February, 1911.)
4. Food habits.
 - A. Study of rations.
 - B. Habits of eating.
 1. Overeating.
 2. Frequency of eating; appetite as a guide.
 3. Vegetarianism.
 4. Proper use of condiments.
5. Cooking.
 - A. Three reasons.
 - B. Best methods.
6. Beverages.
 - A. Water: why use plenty.
 - B. Value and danger of other drinks.
 - C. Alcohol: undesirable effects.

III. FERMENTATION AND GERM DISEASES.

(Conn and Budington, ch. IV; Hough and Sedgwick, ch. XXX.)

1. Kinds of ferment.
 - A. Organized: yeasts, bacteria.
 - B. Unorganized: ptyalin, pepsin, etc.
 - C. Points of similarity and difference.
2. Bacteria.
 - A. Description: size, multiplication, forms.
 - B. Where found.
 - C. Beneficial bacteria; many kinds.
 - D. Harmful (pathogenic) bacteria: few kinds.
3. Immunity.
 - A. Natural: all possess it to some extent.
 1. How increased or decreased.
 - B. Artificial. (See Bulletin State Board of Health, May, 1911.)
 1. Acquired by having disease, vaccination, etc.
4. Methods of killing bacteria discussed.
 - A. Sterilizing.
 - B. Disinfecting.
 - C. Pasteurizing.

IV. DIGESTION OF FOOD.

(Conn and Budington, ch. V, VI, VII, VIII.)

1. Object of digestion.
2. Salivary digestion, or digestion in the mouth.
 - A. Mechanism.
 1. The teeth: sets, kinds, parts, materials, decay.
 2. The tongue: structure and uses.
 3. The salivary glands: location and use.
 - B. Processes.
 1. Mastication: importance, Fletcherism.
 2. Secretion of saliva: how stimulated; quantity.
 3. Starch digestion: work of ptyalin; how long continued; how stopped.
 - C. Diseases of mouth and throat.
 1. Tonsilitis: symptoms, treatment.
 2. Diphtheria: distinguished from tonsilitis; antitoxin treatment (see Bulletin, March, 1910; also, special Bulletin State Board of Health); quarantine.
 3. Mumps: often serious; isolate patient.
 - D. Care of the teeth: keep clean; consult dentist.
3. Gastric digestion, or digestion in the stomach.
 - A. Mechanism: the stomach.
 1. Location, shape, capacity.
 2. Coats, openings, valves.
 3. Gastric glands.
 - B. Processes.
 1. Storage, peristalsis.
 2. Secretion of gastric juice influenced by appetite and psychic stimuli.
 3. Quantity and composition of gastric juice.
 4. Work of gastric juice.
 - a. Of hydrochloric acid.
 - b. Of pepsin.
 - c. Of rennin.

4. Intestinal digestion.
 - A. Mechanism: small intestine, large intestine, pancreas, liver.
 1. Location and structure of each.
 - B. Processes.
 1. Muscular movements: peristaltic.
 2. Secretion of intestinal juice: composition.
 3. Work of pancreatic juice: action of trypsin; of amylase; of steapsin.
 4. Work of bile.
 5. Work of large intestine.
5. Absorption of food.
 - A. By blood vessels: through the liver.
 1. All sugar.
 2. Most peptone, salt, acids and water.
 - B. By lacteals.
 1. All oil products.
 2. Little peptone, salts, acids and water.
6. Diseases of the intestinal tract.
 - A. Summer complaint.
 1. Cause, treatment.
 - B. Appendicitis.
 1. Probable causes: taking cold, constipation, sedentary habits, infection, weak organ.
 2. Treatment.
 - C. Typhoid fever.
 1. Cause: typhoid bacilli.
 2. Germs found in water, milk, oysters.
 3. Flies carry the germs. (See Bulletin State Board of Health, April, 1911.)
 4. Prevention: care of food and drink supply; disinfect all that comes from the sick room.

V. THE BLOOD.

(Conn and Budington, ch. IX.)

1. Quantity of blood.
2. Composition.
 - A. Plasma: composition and use.
 - B. Red corpuscles: size, shape, color, origin, composition, use, fate.
 - C. White corpuscles: size, shape, color, origin, composition, movement, use, fate.
 - D. Platelets: size, shape, color, use.
3. Clotting: description, favorable conditions, purpose.
4. Diseases of the blood.
 - A. Blood-poisoning.
 1. Cause: pus-forming bacteria, usually in a wound.
 2. Prevention: disinfect all wounds; cover with disinfecting ointment and sterile bandage.
 - B. Malaria, ague.
 1. Cause: germs (protozoa) carried by mosquitoes.
 2. Prevention: protect sick person from mosquitoes; destroy breeding places of mosquitoes.
 - C. Yellow fever.
 1. Cause: germs carried by mosquitoes.
 2. Prevention: same as for malaria.

VI. THE HEART AND BLOOD VESSELS.

(Conn and Budington, ch. X.)

1. Heart.
 - A. Location, size, shape, coverings.
 - B. Internal anatomy: auricles, ventricles, valves, septum.
 - C. Regulation.
 1. Impulse to beat.
 2. Inhibitory influences.
 3. Acceleratory influences.
2. The arteries and veins: structure and functions.
3. The capillaries: structure and use.

VII. CIRCULATION OF BLOOD AND LYMPH.

(Conn and Budington, ch. XI.)

1. Causes of blood pressure.
2. Checking hemorrhages.
3. Regulation of the circulation.
4. Abnormal circulation.
 - A. Fainting: Cause and treatment.
 - B. Causes and results of "high pressure."
5. The lymph.
 - A. Source: plasma of the blood.
 - B. Uses: Nourish tissues and collect waste matter.
 - C. Disposal: returned to the blood.
6. Location, function and use of lymph nodes.

VIII. RESPIRATION.

(Conn and Budington, ch. XII, XIII.)

1. The respiratory organs.
 - A. The nose and pharynx: description.
 1. Reasons for breathing through the nose.
 2. Sense of smell: location and use.
 - B. The trachea and lungs: structure and use.
 - C. Diseases.
 1. Colds: caused by bacteria; induced by exposure, improper ventilation, clothing, bathing, exercise.
 2. Pneumonia.
 - a. Usually follows a cold.
 - b. Serious character: call physician.
 3. Tuberculosis.
 - a. Cause: tubercle bacilli.
 - b. Varieties.
 - c. Means of checking tuberculosis. (See text, pp. 185 to 189, Bulletins State Board of Health.)
 - d. Treatment: pure air, nourishing food, exercise, sunshine.
 2. Mechanism and chemistry of respiration.
 - A. Rib breathing and diaphragm breathing: need of large capacity.
 - B. Changes in the air during breathing: oxygen, carbon dioxide, temperature, moisture.
 - C. Breathing and exercise—"second wind."
 - D. Ventilation.
 1. Necessity.
 2. Principles (six).
 3. Systems of ventilation (Davison).
 4. Rule: "ventilate."
 - E. Treatment in cases of suffocation and drowning (Davison).
 - F. The vocal organs: structure.
 1. Discussion of pitch, quality and loudness.
 2. Care of the voice.

IX. EXCRETION.

(Conn and Budington, ch. XIV, XV.)

1. Organs of excretion: list, with substances eliminated.
These substances are waste products separated from the blood, and therefore do not include indigestible portions of food expelled from the intestine.
2. Anatomy of the kidneys.
 - A. Number, size, location, shape.
 - B. Structure: shown by diagram and studied by specimen of pig's kidney.
3. Action of kidneys in excreting urine: filtration of water and salts, and cell-selection of urea.
4. Diseases.
 - A. Bright's disease.
 1. Failure of kidneys to excrete urea.
 2. Excretion of albumin.
 3. Consult physician.
 - B. Diabetes.
 1. Excretion of sugar by kidneys.
 2. Faulty nutritive processes.
 3. Diet, little carbohydrate.
 4. Consult physician.
5. The skin.
 - A. Structure.
 - B. General functions.
 - C. Glands.
 1. Sebaceous: location, description, work.
 2. Sweat: location, description, work, regulation.
 - D. Hair and nails: care of each.
6. Regulation of body temperature: by lungs, skin, circulation and perspiration.
7. Care of the skin.
 - A. Bathing.
 1. Need, frequency, kinds.
 2. Rule: "bathe."
 - B. Clothing: quality and quantity for different seasons.
 - C. Burns.
 1. Smother fire.
 2. Cover burn with oil or vaseline.
 - D. Frostbites: warm slowly and keep cool.
 - E. Pimples, boils, carbuncles.
 1. Treat antiseptically.
 2. Do not pick with the fingers.
 3. Protect with sterile covering.
 4. Those subject to pimples should use medicated soap.

X. THE SKELETON: BONES, CARTILAGES, LIGAMENTS.

(Conn and Budington, ch. XVI.)

1. Skeletons the pupils have seen.

- A. Outside skeletons.
- B. Inside skeletons.
- C. Mixed skeletons.

NOTE.—Every high school should be supplied with an articulated human skeleton. Pupils will bring a variety of bones to the class for comparison.

2. Functions of the skeleton.
3. Chemical composition of bone.
 - A. In children.
 - B. In adults.

4. Care of the bones.
 - A. Habits and nutrition of child.
 - B. Repair of broken bones.
5. Cartilage: structure and uses.
6. Joints.
 - A. Structure.
 - B. Classification.
 - C. Sprains and dislocations: prevent inflammation; give rest or little exercise.
7. Care of the feet: proper shoes to wear.

XI. MUSCLES AND TENDONS.

(Conn and Budington, ch. XVII; Hough and Sedgwick, ch. XVII.)

1. Muscles the pupils have seen: the various colors of muscles in fowls, fishes, quadrupeds.
2. Tendons: studied in class, using such material as the leg of a chicken.
3. Muscles classified as to—
 - A. Structure.
 - B. Form.
 - C. Location.
 - D. Nerve control.
4. Conditions affecting efficiency.
 - A. Temperature.
 - B. Fatigue.
 - C. Nutrition.
 - D. Training.
5. Effects of use and disuse.
6. Exercise.
 - A. Physiological effects (eight).
 - B. Characteristics of a good exercise (five).
 - C. Corrective exercises for—
 1. Round shoulders.
 2. Drooping neck.
 3. Lateral curvature of spine.
 4. Lack of development of other parts.
 - D. Hygienic value of corrective exercises.
 - E. Value of plays and games.
 - F. Athletics, use and abuse.
 - G. Exercises for nervous coördination.
7. Diseases of muscles.
 - A. Tetanus.
 1. Caused by tetanus bacillus: germ from the soil introduced into flesh.
 2. Preventive measures.
 - a. Thoroughly disinfect the wound.
 - b. In case of unusual danger use antitoxin.
 3. Treatment: administer antitoxin early, in large doses.
(See Bulletin Kansas State Board of Health, May, 1911.)

XII. THE NERVOUS SYSTEM.

(Conn and Budington, ch. XVIII.)

1. Terms to be understood: neuron, dendrite, axon, nerve fiber, nerve center, stimulus, reaction, motor, sensory, afferent, efferent, central, peripheral, reflex.
2. Central nervous system, consisting of—
 - A. Central organs: brain, cord, ganglia.
 - B. End organs: special sense organs and motor end plates in muscles.

3. Sympathetic nervous system, consisting of—
 - A. Ganglia.
 - B. Sympathetic nerves.
 - C. Plexures (about internal organs).
4. Structure of the brain and spinal cord.
5. Functions of the different parts.
 - A. Cerebrum.
 - B. Cerebellum.
 - C. Medulla.
 - D. Spinal cord.
6. The cranial nerves: general location and function.
7. The spinal nerves.
 - A. Classes, roots.
 - B. General function.
8. Reflex action.
 - A. Mechanism: reflex arc.
 - B. Advantages of reflex action: quick, correct, relief to brain.
 - C. Reflex action and habit.
9. Functions of the sympathetic system.
 - A. Control circulation.
 - B. Control secretion, excretion and digestion.
 - C. Harmonize action of various organs.
10. Care of the brain.
 - A. Need of exercise; kind and amount.
 - B. Rest and sleep necessary.
11. Diseases of the nervous system.
 - A. Idiocy: cause; training of feeble-minded.
 - B. Insanity.
 1. Causes: heredity, ill health, alcoholism, trouble, over-work, injury.
 2. Prevention: avoid causes, if possible.
 - C. Paralysis—cause: usually clot of blood.
 - D. Nervous prostration.
 1. Causes: continued mental strain, lack of exercise, improper nutrition.
 2. Treatment: complete rest and change of scene and occupation; proper exercise and diet.

XIII. STIMULANTS AND NARCOTICS.

(Conn and Budington, ch. XX; Hough and Sedgwick, ch. XX.)

1. Stimulants defined.
2. Tea, coffee, cocoa.
 - A. Active principle of each.
 - B. Best methods of preparing.
 - C. Benefits of use.
 - D. Dangers to the nervous, the dyspeptic, the young.
 - E. Dangers of the drug and patent-medicine habit.
3. Strychnine—caution: use only when prescribed by physician.
4. Narcotics defined.
5. Opiates: laudanum, paregoric, morphine, etc.; effects—habit.
6. Cocaine, chloral: enslaving influence.
7. Alcoholic drinks classified: examples and strength.
8. Physiological action of alcohol.
 - A. False stimulation or exhilaration.
 - B. Inhibition of brain functions.
 - C. Alcohol and muscular work: experiments.
 - D. Alcohol and arteries: observations.
 - E. Alcohol and exposure to cold: danger.

9. Pathological conditions due to alcohol.
 - A. Acute.
 1. Mental.
 2. Bodily.
 - B. Chronic.
 1. Mental.
 2. Bodily: nervous system, heart, arteries, stomach, liver, kidneys.
10. Relation of intemperance to poverty; to crime; to insanity; to disease in general (Davison).
11. Tobacco.
 - A. A variety of effects.
 - B. Arguments against its use.
 - C. Our young men are being injured more by tobacco than by alcoholic drinks.
“Boys who use cigarettes seldom fail in later life; they have no later life.”—DAVID STARR JORDAN.

XIV. ORGANS OF SPECIFIC SENSE.

(Conn and Budington, ch. XXI, XXII.)

1. The eye.
 - A. Description, location and use of the principal parts.
 - B. Defects: their cause and remedy.
 1. Nearsightedness.
 2. Farsightedness.
 3. Astigmatism.
 4. Cataract.
 - C. Care of the eyes in regard to—
 1. Eye rest.
 2. Illumination of object.
 3. Flickering light.
 4. Glossy paper.
 5. Cleanliness.
 6. Removing foreign substances.
 - D. The expert oculist versus the “quack.”
2. The ear.
 - A. Description and use of the outer, middle and inner ear.
 - B. Function of the semicircular canals.
 - C. Perception of pitch.
 - D. Deafness: causes and prevention.

XV. CONTROL OF PUBLIC HEALTH AND SANITATION.

(Conn and Budington, ch. XIII; Hough and Sedgwick, ch. XXVI to XXXV, inclusive.)

1. Factors determining public health.
 - A. Thickly settled communities.
 - B. Personal habits.
 - C. Climate.
 - D. Cleanliness of surroundings.
 - E. Mosquitoes, flies, fleas, rats.
 - F. Pet animals: cats and dogs.
2. Plan of campaign for public health.
 - A. Prevent spread of disease germs.
 1. By disinfecting.
 2. By quarantining.
 3. By care on the part of those who are sick.
 - B. Increasing individual resistance.
 1. By sanitary conditions of home and neighborhood.
 2. By instruction in hygienic living.

3. Preventable diseases: how spread and how prevented.
 - A. Tuberculosis.
 - B. Typhoid fever.
 - C. Diphtheria.
 - D. Scarlet fever, measles and whooping cough.
 - E. Smallpox.
4. The home.
 - A. Location: light and air.
 - B. The house.
 1. Furnishing.
 2. Cleaning: sweeping, dusting, vacuum cleaners.
 3. Rugs versus carpets.
 4. Sanitary cellar.
 5. Heating and ventilation.
 6. Lighting.
 - C. Water supply.
 1. Necessity for pure water.
 2. Location and construction of well (see Bulletin Kansas State Board of Health, January, 1911).
5. Sewage: systems of disposal.
6. Health officials.
 - A. Duties and authority.
 - B. Need of coöperation on part of public.

PSYCHOLOGY.

The problem of pedagogy is to lay down proper rules for education, and these rules may come only from the history of education and from child study. The history of education shows what things and what theories have proved successful in school practice; child study points out the natural ways in which the mind develops, from which we deduce the laws of mental activity and learn at what time the various powers of the mind appear. Hence the prime importance of the study of psychology for teachers.

Successful teachers obey psychological laws, consciously or unconsciously. The born teacher employs what we call psychological intuition, and deftly hits the mark in his teaching. The poor teacher, from ignorance or inability, violates psychological principles. We must gain expertness where we can. All teachers should be able to recognize those relatively few elemental mental laws, which should always be observed and which only ignorance allows us to violate. A training in psychology can reveal these to us. An equally important negative service which we may expect from psychology is that it will provide us with an insight into the complexities of all educational processes, revealing teaching as a serious business and a worthy profession—a challenge to our best powers and most ingenious devices. Through such a study we should see that there is possibly an assignable reason for cases of poor spelling, poor reasoning, poor imagery in certain subjects, as geometry, poor habit-forming power, lack of concentration in attention, emotional instability, weakness of will, low speed rate in learning, or lack of transference of specific training.

During the first days of the course the instructor should be prepared to show some of the practical bearings of psychology on pedagogy, and some of the more striking laws that will be dealt with later might well be brought up, such as the importance of every teacher's knowing of the different perceptual types of his children—visual, auditory, and motor. It is probable that each pupil will think himself fully as visual-minded as any other, but in every class of ten to fifteen probably one boy or girl will be found who will prove to be quite motor-minded. Right here the different ways of teaching spelling should have attention. Perhaps this example may suffice to show the way in which it is intended that the psychology should be taught throughout. No one ever learned this subject through a textbook, nor made a successful teacher of psychology, who did not really teach the subject rather than hear class recitations from day to day. The teacher should store up a fund

of illustrations from actual experience, and should make continual use of some such book as Halleck's Psychology and Psychic Culture for additional illustrations, and of James's Talks to Teachers for the correct pedagogical applications of each chapter. Indeed, the teacher should never allow himself to begin a chapter in the text without having the corresponding chapter in the last mentioned book at his tongue's end.

The young student must realize that psychology is not child's play nor parlor entertainment. It offers special difficulties, and throws the student into bewildering confusion very often. This happens because teachers too precipitously usher the student into this new psychic world. All high-school students, before they begin psychology, have been concerned with persons, things and sensible impressions from outside objects. They are now introduced to a world that can not be sensed, nor handled, nor measured. It is intangible, elusive and complex. Only the skill of the teacher can avoid hopeless confusion. Never in the psychology classes should mere word work, mere book talk, take the attention of the class from the real thing—their own experiences. Their own mental lives constitute the only psychological laboratory, and the good teacher is the one who can practice his students best in observing their own mental operations, a process we call introspection. Many inexpensive experiments may be easily devised for class and individual use by adapting some of the devices of the Milton H. Bradley Company, Springfield, Mass., or the Whipple Tests of the C. H. Stoelting Company, Chicago, or those suggested in Seashore's Elementary Experiments in Psychology and Judd's Laboratory Manual. The main thing is to arouse a permanent interest in the workings of the mind. As soon as some groundwork in the elements of psychology, sensation, imagery, feeling and attention, and in the special processes, such as perception, memory and reasoning, can be acquired, the students may address themselves directly to the definite educative processes of the schoolroom.

During the whole course of this study seek at every point to develop the idea of the unitary character of the mind. The mind acts as a whole, though sometimes one phase happens to be emphasized, then another. At such times we say that we are perceiving, remembering, or reasoning, as the case may be. For purposes of study, indeed, we may single out a certain process, but all are interrelated and represented in every other. These correlations should be constantly held in mind. As an instance of this take apperception, which may profitably come in for consideration when dealing with perception, attention, interest, memory and volitional action.

Under sensation and perception bring out the part that sense experience plays in the development of the child and the need of large opportunity for the acquisition of sense material.

Training in careful habits of observation will result in usable memory-images, whereas the lack of clear-cut perceptions seems to result in hampering mental efficiency all one's days.

In the very beginning stress should be laid on the fact that all thought goes over into action, and not a week of the course should be passed by without showing from some new point of view that "Whatsoever a man thinketh in his heart, so is he." Among other things, this means to the teacher that he will never bring to the pupil's attention a thought he does not want acted upon, such as rules beginning with "Don't"; and that he will never teach homonyms as such. There is as much real difference between "sale" and "sail" as if they did not sound alike.

In dealing with the chapter on "Feeling," the important thing for pedagogy is to remember that while repetition makes sensations keener and more delicate, it dulls and blunts the feelings. The wisdom of this is apparent in every walk of life. The physician and nurse become more and more skillful with every case they treat, and seem more and more callous to suffering, but no one would care for the services of one who was affected in an opposite way by much attention to the sick. This means much in pedagogy. For instance, the teacher who continually threatens is never heeded, and he who helps his pupils so much that they always turn to him instead of becoming more and more independent is a poor teacher. It is true that the best teacher is he who makes himself unnecessary.

Give large place to the study of attention and its relation to other mental processes. Note that the key to an understanding of attention, and apperception also, is found in the study of the natural and acquired tendencies of the nervous system. The focal character of attention and the fact that it is a question of more or less consciousness can be easily brought out by simple illustrations. Children are never really inattentive. The teacher's problem lies in securing their attention to the right things, in gaining for the relatively uninteresting ideas of the school subjects a proportionate share of the child's conscious energy in competition with the large mass of ideas instinctively appealing to him. In the early years only passive attention is possible. It is unnatural for the child to hold to long-continued tasks, and the teacher will show his art in graduating the burden to the increasing power of the child. Almost the whole art of the teacher lies in his skill in making the active attention of the pupil turn into a passive attention, and through a good method, which means a right handling of interest and apperception, in turning forced attention into an acquired attention that shall be strong.

Bring out the relation of attention to will. When children are trained to do the tasks of the schoolroom, we say, and rightly, that their wills are being developed, but this manifests

itself as an increase of power to give active attention. The school, perhaps even more than the home, furnishes the means for training the will, for giving the ability to make a sustained effort. This, of course, is the larger part of its function. Perhaps as important as anything in psychology is a right view of the will or action side of consciousness. Consciousness is motor. All ideas tend to result in action.

Life, and especially child life, is largely lived on the level of instinct. In great measure, the child in his development does repeat the history of the race. He has many instincts and natural interests which may be made useful in his development. The collecting or acquisitive impulse is one of these. The possibilities of play in education are far greater than are dreamed of by the uninstructed. There are a host of social instincts, such as imitation and suggestion, the acquiring of language, the gang instinct, rivalry, etc., which must be reckoned with in a scheme of education, for instincts are in one sense interests and have impelling power to sway the child for good or evil. Again, no truer insight into child life may be gained than by a study of his egoistic impulses. It is here we reach a basis for dealing with questions of a disciplinary character.

The following outline follows the order of presentation of Betts's "The Mind and Its Education," which is suggested as the text:

1. The mind, or consciousness.
 - A. How we may come to know mind.
 - B. Its personal character.
 - C. Introspection the one means of study.
 - D. Consciousness like a stream.
 1. A wave means attention.
 2. Contents of the stream.
 - E. Three modes of activity: knowing, feeling and willing.
2. Attention.
 - A. Nature.
 - B. Always present in some form or other.
 - C. Effects: increase of efficiency.
 - D. Types of inattention; how remedied.
 - E. How secured:
 1. Involuntary.
 2. Nonvoluntary.
 - a. Interest and nonvoluntary attention.
 3. Voluntary.
 - a. Will and voluntary attention.
 - F. The habit of attention.
3. The brain and nervous system.
 - A. The machine through which the mind works.
 - B. Structure.
 - C. Central nervous system—brain and cord.
 - D. Peripheral nervous system—end organs.
 - E. Sensory and motor functions.
 - F. Dependence of the mind on the senses for its material.

4. Sensory and motor training.
 - A. Education dependent on both body and mind.
 - B. Efficiency of nervous system depends on development and nutrition.
 - C. Development through varied stimuli and untrammeled response.
 - D. The sensory-motor arc.
 - E. Good nutrition versus malnutrition.
 - F. Necessity for sleep and freedom from worry and overfatigue.
5. Habit.
 - A. A man is but a bundle of habits.
 - B. Habit-formation a method of economy.
 - C. One can not prevent habits from forming.
 - D. Physical basis of habit.
 - E. Control of habits through our actions.
 - F. The part of habit in education.
 - G. Value and danger of even good habits.
 - H. Maxims for habit-forming.
6. Sensation and perception.
 - A. Mind constructs its world from sense stimuli.
 - B. How thought reaches still farther.
 - C. Qualities usually ascribed to objects really existent in mind.
 - D. Problem confronting the child; how he proceeds.
 - E. Perception of objects and of space.
 - F. Necessity of entering largely into world of material environment.
7. Mental imagery.
 - A. All present thinking dependent on past experience.
 - B. Past experience conserved by physical habit of mental images.
 - C. Galton's test of imagery.
 - D. Value of wide range of imagery.
 - E. Application to education; use in school subjects.
8. Memory.
 - A. Nature of memory.
 1. Physical basis.
 2. Retention and recall dependent on neural plasticity and activity.
 3. Images the material of memory.
 - B. Types of memory.
 - C. Laws of memory.
 - D. What constitutes a good memory.
 - E. Improvement of the memory.
 - F. The misuse of mnemonic devices.
9. Imagination.
 - A. Test of a good imagination.
 - B. Uses of imagination.
 - C. Application in science, art, everyday life, conduct, ideas.
 - D. Imagination limited by—
 1. Material available in form of images.
 2. Constructive ability.
 3. Definite purpose.
 - E. Cultivation and abuse of imagination.
10. Thinking.
 - A. Function of thinking is to discover relations.
 - B. The thinking of child and of adult.
 - C. Classification of knowledge accomplished through thinking.
 - D. Nature, formation and uses of concepts.
 - E. Judgment and reasoning, forms and uses.
 - F. Cultivation of thinking.

11. Instinct.
 - A. Instinct the result of race experience.
 - B. Through instinct racial habits are inherited by individual.
 - C. Modified through education and made into individual habits.
 - D. Ripening and transitoriness of instincts.
 - E. Human instincts of imitation, fear and play.
12. Feeling and its function.
 - A. An accompaniment of all mental processes.
 - B. Importance as a motive.
 - C. Feeling tone, or mood; how produced, and influence.
 - D. How our dispositions are formed; part played by temperament.
13. Interest.
 - A. A selective agency among our activities.
 - B. Influence in directing stream of thought.
 - C. Objective side of interest.
 - D. Dynamic phase of interest.
 - E. Immediate and remote interests; part they play as motives.
 - F. Danger of early specialization in our interests.
 - G. Interest and the will.
 - H. Interest and character.
14. The emotions.
 - A. Relation of instinct and emotion.
 - B. The physical side of emotion.
 - C. Control of emotions.
 - D. Desirable emotional balance.
 - E. Emotions as motives.
 - F. Danger from arousing emotions without giving opportunity for expression.
 - G. Emotional habits.
15. The will.
 - A. Concerns itself wholly with causing or inhibiting acts.
 - B. Various types of action.
 1. Physiological reflexes.
 2. Instinctive acts.
 3. Ideo-motor acts.
 4. Deliberative acts.
 - C. The image and the act.
 - D. Process of deliberation.
 - E. Emotional factor in decision.
 - F. Final test of power measured in attention.
 - G. Training of the will in common duties of life.
16. Self-expression and development.
 - A. Interrelation of impression and expression.
 - B. Many sources of impressions.
 - C. Various forms of expression.
 - D. Necessity for cultivating expression.
 1. Intellectual value of expression.
 2. Moral value.
 3. Religious value.
 4. Social value.
 5. Educational value.
 - E. Expression in the home and school.
 - F. Expression as related to character.

METHODS.

This outline is based upon Charters's Teaching the Common Branches.

SUGGESTIONS TO TEACHERS.

The plan on which this outline is worked out is as follows: Thirty-two lessons are to be given on the textbook, following the order of subjects in the book. The last ten lessons consist of a reorganization of material under such topics as *interest, drill, etc.*, as applied to all subjects.

In studying the course the text should be followed more or less closely. In the suggestions given below attention is called to those topics under each subject which should be emphasized.

The questions at the end of each chapter should be used as much as time will permit.

The references at the end of each chapter have been carefully selected, and teachers are advised to read these in order to get a broader view of their fields.

1. Spelling. (Three lessons.)
 - A. The standard of good spelling.
 - B. Simplified spelling. (The teacher should write to the Simplified Spelling Board, No. 1 Madison Avenue, New York City, and secure enough copies of their literature to supply each member of the class.)
 - C. The course of study. (Students should be given, as an exercise, the making of lists of words from sources other than the speller.)
 - D. Generic values and specific needs.
 - E. Methods of drill.
2. Penmanship. (One lesson.)
 - A. Students should be given considerable practice in using the Thorndike scale. (These can be secured in convenient form and large type for five cents each by writing to Bureau of Publications, Teachers' College, Columbia University, New York.)
 - B. The writing hospital for the seventh and eighth grades.
3. Language. (Three lessons.)
 - A. Interest, particularly in its relation to the selection of topics for composition, which are chosen because of interest to the writer and to an audience.
 - B. Correlation.
 - C. Oral and written errors.
 - D. Use of dictionary.
4. Grammar. (Three lessons.)
 - A. The function of grammar.
 - B. Parsing, analysis and diagramming.
 - C. When to teach grammar, and what to teach.
 - D. Creating a need for grammar.
 - E. The inductive method.
 - F. Drill and application.

5. Reading. (Five lessons.)
 - A. The structure of reading.
 - B. The standards of good reading.
 - C. The course of study as based upon the stages of development of children.
 - D. Methods of teaching primary reading.
 - E. Supplementary reading for children in the primary grades.
 - F. Methods of correcting errors in oral reading.
 - G. Methods of studying literature.
 - H. Methods of memorizing.
6. Drawing. (One lesson.)
 - A. The function of drawing.
 - B. The course of study in drawing.
 - C. Study for appreciation.
 - D. Traveling galleries.
 - E. Correlation.
7. Music. (One lesson.)
 - A. The relation of music to reading and composition.
 - B. The use of phonographs.
 - C. The illustrative lesson on pages 179 ff.
8. Handicrafts. (Three lessons.)
 - A. The course of study.
 - B. Equipment for rural schools in carpentry.
 - C. Sewing in rural schools.
 - D. Domestic science clubs and school luncheons.
 - E. The use of primitive industries and illustrative work in primary handwork.
 - F. Correlation of advanced hand work with other school subjects.
9. Geography. (Two lessons.)
 - A. Rational geography.
 - B. The course of study.
 - C. Home geography.
 - D. Motives for studying.
 - E. The use of imagination, and aids to imagination, particularly pictures, maps and scrapbooks.
10. History. (Three lessons.)
 - A. The function of history.
 - B. Rural-school history.
 - C. Local history.
 - D. Correlation.
 - E. Methods of studying history.
 - F. Dates.
 - G. Current events.
11. Civics. (One lesson.)
 - A. The order of importance in treating topics should be, (1) local, (2) state, and (3) national.
12. Arithmetic. (Three lessons.)
 - A. The content of the course of study.
 - B. When to teach arithmetic.
 - C. The teacher should write to The Department of Coöperative Research, 82 Elliott Street, Detroit, Mich., for their manual of instructions giving and scoring the Courts Standard Tests in Arithmetic. At least one copy should be kept in the library, and enough copies of the problems should be secured to give the class familiarity with the tests.
 - D. Interest in arithmetic.
 - E. Teaching the processes.
 - F. Drill and application.
 - G. Tables.

13. Physiology and hygiene. (One lesson.)
 - A. Emphasis should be laid upon the fact that the function of physiology is to help the pupil to understand and practice the rules of hygiene.
 - B. The "geography" of the human organs.
14. Agriculture. (Two lessons.)
 - A. The value of the study of agriculture.
 - B. The course of study.
 - C. Agriculture clubs.
 - D. Textbooks and bulletins.
 - E. Class trips.

In the following ten lessons it is suggested that the teacher review the book by using the page references as given in the index; *e. g.*, under "Interest, immediate and mediate," references may be found on page 352 to both immediate interest and mediate interest as they are discussed in the different chapters of the book.

These pages, to which references are made in the index, should be read by the student and discussed in class. In this way the general method underlying the treatment of each school subject may be systematized.

1. The intrinsic function of subject matter.
2. The course of study.
3. Interest, immediate and mediate.
4. Generic and specific values.
5. Needs and problems.
6. Correlation and alteration.
7. Drill and application.
8. The inductive and deductive methods.
9. Assignment and study.
10. Class mechanics.

MANAGEMENT.

This outline is based on Seeley's New School Management; but upon the topics with which they deal constant reference should be made to White's School Management, Dutton's School Management, Dinsmore's Teaching a District School, Sabin's Common Sense Didactics, and McKeever's Psychologic Method in Teaching, in the normal-training reference library.

1. The personality and preparation of the teacher. (Four lessons.)
 - A. Responsibility of the teacher's position.
 - B. Disposition and temperament.
 - C. Bodily health.
 - D. Moral habits.
 - E. Acquired knowledge.
 - F. Attitude of teacher toward non-school interests.
 - G. Duties and rewards of the teacher. (See especially Dutton and White.)
2. Beginning to teach. (Two lessons.)
 - A. Securing a school.
 - B. Making a contract; Kansas law as to teacher's contracts and the breaking of them.
 - C. What to learn of a school before the first day.
 - D. What to do the first day.
3. The permanent program.
 - A. Order of subjects.
 - B. Recitation periods.
 - C. Study periods.
 - D. Intermissions.
 - E. Alternation. (See Course of Study for the Rural Schools of Kansas, 1914, General Suggestions.)
4. Classification and grading. (Two lessons.)
 - A. Comparison of city and country schools as to grading.
 - B. Can country schools be graded? (Instructor should call attention of class to the State Course of Study for Rural Schools, and so far as possible have them become individually acquainted with it.)
 - C. Advantages of graded schools.
 - D. Consolidation of schools. (Secure pamphlet on Consolidation from State Superintendent's office.)
5. Government. (Five lessons.)
 - A. Aim of discipline.
 - B. Rules.
 - C. Government by incentives.
 - D. Appeals to honor, self-respect, etc.
 - E. Aim of punishment; and principles governing its use.
 - F. Kind of punishment. (See especially Dutton, White, and Dinsmore.)

6. School evils and how to treat them. (Three lessons.)
 - A. Carelessness.
 - B. Laziness.
 - C. Tardiness.
 - D. Irregularity in attendance.
 - E. Tattling.
 - F. Whispering.
 - G. Lying, cheating, and stealing.
 - H. Impudence.
 - I. Rebellion.
 7. School virtues and how to cultivate them. (Four lessons.)
 - A. Neatness.
 - B. Accuracy.
 - C. Silence.
 - D. Industry.
 - E. Truthfulness.
 - F. Conscientiousness.
 - G. Politeness.
 - H. Obedience.
 8. The teaching of morals in school. (Two lessons.)
 - A. By the example of the teacher.
 - B. Informally, by using incidents in the daily school life.
 - C. Formally, by specific lessons. (See especially White and Sabin.)
 9. Cautions and admonitions to teachers as to— (Three lessons.)
 - A. Use of sarcasm.
 - B. Threatening and scolding.
 - C. Keeping promises.
 - D. Being hasty.
 - E. Giving help.
 - F. Dealing with dull children.
 - G. "Seeing things."
 - H. Inspiring reverence for things holy.
 10. Incentives to school work. (Two lessons.)
 - A. Emulation.
 - B. Class rank.
 - C. Prizes.
 - D. Marking; why; how; when.
 - E. The value of these stimuli as compared with subject matter itself. (See especially Dutton and White.)
 11. Promotion.
 - A. Purpose of.
 - B. Frequency of.
 - C. Basis of.
 12. Examinations, tests and reviews.
 - A. Examinations; characteristics of; educational value of; character.
 - B. Tests; purpose; character.
 - C. Reviews; when; why; how.
 13. The recitation. (Four lessons.)
 - A. Purpose.
 - B. Assignment of the next day's lesson.
 - C. How the pupil should prepare for the recitation.
 - D. How the teacher should conduct the recitation.
 - E. The five "formal steps." (See especially Dutton, McKeever, and Sabin.)
- (Chapter XVII should be omitted.)

14. Duty of the teacher— (Three lessons.)
 - A. To the pupils.
 - B. To the parents.
 - C. To the community.
 - D. To the school board.
 - E. To his profession.
 - F. To his successor.
 - G. To himself.
(Chapter XIX may be omitted.)
15. The school surroundings.
 - A. The school grounds.
 - B. The school building.
 - C. The outbuildings.
 - D. The interior of schoolroom; arrangement; furnishings; decoration; and ventilation.

ARITHMETIC.

I.—WORK PRECEDING TEXTBOOK.

The child's early lessons in numbers must be closely related to his experience with things; for this reason sense training should be the foundation for number study. The power to make accurate mental images should be developed in the child's early school life. Exercises in eye, ear and touch training should be given, with accuracy as the end in view. Give some exercises for each. Discuss.

The idea *number* is not an object of sense perception. *Number* is taught with the help of objects for the formation of groups. Discuss: (1) What should these objects be? (2) When should the teacher dispense with objects? (3) How do we get our idea of large numbers?

The child gets his first notion of numbers from counting things; in counting he measures the group by the unit with which he is working, and from this a ratio is obtained.

To the number of a group, or the thing itself, or the operation, the child passes to the *name*.

From this one *name* he learns that there is one *symbol*.

Discuss the notion of "one-to-one correspondence," namely, first the thing, then the name, and finally the symbol.

The fundamental process in solving problems:

1. By abstraction we pass to numbers.
2. Then pass to symbols, and make an equation. Solve the equation, the result being a symbol.
3. Find the number corresponding to this symbol, and the problem is solved.

Illustrate.

Discuss the following:

1. The child learns to count things, thus getting the notion of number. These things are considered alike, and they may be single objects or groups.
2. He acquires the number series, exercising with it beyond the circle of actually counted things.
3. The symbols may not be learned with the first presentation of numbers, but they should be acquired soon.
4. Unconsciously and gradually the child will acquire the idea of the one-to-one correspondence of *number*, *name*, *symbol*, and thereafter the pure concept of number will play a small part in his arithmetical calculations.
5. The ratio idea of number should be introduced early, and applied in the work of fractions.

How may games and exercises be used to make the child familiar with common objects? How develop familiarity with terms of comparison, such as larger, largest; heavier, heaviest; wider, widest, etc.? How may familiar facts be utilized to develop the child's power to see, to image, and to form proper judgments? How may a thorough mastery of the forty-five combinations in addition be obtained?

Name and discuss the five formal steps in the development of a lesson. Apply these steps to a simple lesson in arithmetic.

Discuss and outline the work for the first three years.

The value and use of oral arithmetic.

Subject taught largely for its utility value; induction plays the important part.

The culture value; pupils led to make their own investigations and to draw their own inferences.

II.—NOTATION AND NUMERATION.

The Roman, French, and English notations.

The Roman notation.

1. Where used.
2. Symbols used and their value.
3. Values produced by a combination of these symbols; develop principles for making numbers from Roman symbols.

The Arabic notation.

1. Symbols used.
2. The decimal scale of notation. Explain.
3. Values of digits.
 - a. Name of value.
 - b. Place value. Develop.

Explain the different steps in reading numbers.

- a. Point off into periods. Why?
- b. Name the periods.
- c. Read the periods.

Problems on pages 3, 4 and 5, Smith's Advanced Arithmetic.

The Roman numerals are taught incidentally the first three years; the first year from I to XX, the second year from XX to L, and the third year from L to M. Discuss.

Facility in handling numbers should be emphasized. Discuss.

III.—ADDITION.

First the forty-five combinations in addition. Pupils should be accustomed to read combinations as they read words. When they see 5 3 they should say "eight," just as they say "cat" when they see the combination c-a-t. Discuss.

The pupil should be familiar with the sign +; a certain operation has one name and one symbol. Explain. The idea of addition, addends, sum and "plus" defined through use.

Develop the principle that "only like numbers can be added."

The child is not ready for the adding of columns until he is thoroughly familiar with the combinations. Practice adding both vertical and horizontal columns. Why?

One of the first things a child should learn is the necessity for checking each operation. Why? Addition is checked by adding the column in the opposite direction. Why?

Example:

3288	26
4597	27
6854	21
2657	15
17396 17396	

Oral work: First column, "seven, eleven, eighteen, twenty-six." Bring down the number 26 and add the column in opposite direction, "eight, fifteen, nineteen, twenty-six," which checks the column. Add the tens column in like manner, placing the result 27 underneath and one place to the left of 26. Finally, add the partial results.

Add and check a few problems on pages 8, 9 and 10 of state text.

The word "carry" eliminated. How can the decimal scale of notation be applied to addition, to explain the so-called "carrying"?

Objects to be obtained: Accuracy first, speed second, and neatness last. Rapid oral work given daily. Use problems from pupil's experience to create interest. Discuss.

IV.—SUBTRACTION.

Addition and subtraction should be taught together. Show how this may be done. Discuss the method of making change. Why valuable? Eliminate the word "borrow." By means of a simple problem, subtract without the use of this word. Teach the terms minuend, subtrahend, remainder or difference through use. Distinguish between difference and remainder.

Check subtraction by adding subtrahend and remainder or difference, and compare with the minuend.

Solve the oral problems on page 13; solve and check problems on page 14.

Make use of the equation in addition and subtraction.

$$\text{Example: } \$143.50 - \$127.25 = \$16.25.$$

All written problems should consist of statement and solution. Any pupil who can not state a problem can not solve it. Discuss.

Example: A man bought a horse for \$175 and sold it for \$215. How much did he gain?

Statement:

$$\begin{aligned} \$175 &= \text{cost.} \\ \$215 &= \text{selling price.} \\ &\text{Find gain.} \end{aligned}$$

$$\$215 - \$175 = \$40, \text{ gain.}$$

Each step should be explained orally. From two old (known) quantities the new (unknown) is obtained.

V.—MULTIPLICATION.

Multiplication tables learned by means of objects, or by counting. Each pupil makes his own tables. The formation of tables followed by drill for power and skill.

Teach the symbol \times and the words *multiply* and *product*.

Write the multiplier first, according to modern custom; thus,

$$2 \times 3 = 6.$$

2 is the multiplier, and the character \times is called *times*.

Develop the principles of multiplication:

- a. The multiplier is always an abstract number.
- b. The multiplicand may be either abstract or concrete.
- c. The product is the same as the multiplicand.

Give practice in problems found on page 93, Primary Text. Why valuable?

Develop the *power* of a number.

Develop the principle, "The product of two numbers divided by one of them gives the other."

Check multiplication (1) by dividing the product by one factor; (2) by multiplying by factors of the multiplier.

Teach the terms multiplicand, multiplier, factor, and multiples.

Statement of problems, use equation for.

Example: At \$72 an acre, how much must a man pay for 28 acres of land?

Statement:

$$\begin{aligned} \$72 &= \text{cost per acre.} \\ 28 \text{ acres} &= \text{land bought.} \\ &\text{Find cost.} \end{aligned}$$

$$28 \times \$72 = \$2016, \text{ cost.}$$

Oral analysis should always accompany written solutions. Practice problems, page 18, and problems 31, 32 and 33, page 22, Advanced Arithmetic.

Short methods:

- a. Aliquot parts.
- b. Powers of 10.

Pages 179 to 183.

VI.—DIVISION.

Division developed from multiplication. Pages 97 to 105, Primary Arithmetic.

Teach the symbol \div and the words division, divide, dividend, divisor, quotient.

Show that division can be indicated by means of the division symbol, the fraction, and the ratio. Teach the idea "fraction" as unfinished division.

Read $\frac{3}{4}$ as "the fraction, three divided by four."

Explain the two kinds of division and teach the analysis that should accompany each. Page 23.

Develop the principles:

- a. If the divisor is abstract the dividend may be either concrete or abstract, and the quotient is the same as the dividend.
- b. If the divisor is concrete the dividend must be concrete, and the quotient must be abstract.

Study the method of developing long division, Primary Arithmetic, pages 176 to 186.

Checking: The dividend is the product of the quotient and divisor, plus the remainder, if any.

Statement and solutions two kinds of division:

Example: (a) Pure division: If a piece of land containing 289 acres is cut into 17 equal parcels, what is the area of each?

289 acres = area of land.

17 = number of parcels.

Find area of each.

$289 \text{ A.} \div 17 = 17 \text{ A.}$, area of each.

Example: (b) Partition: Divide \$289 among a number of boys, giving each one \$17; find the number of boys.

\$289 = money divided.

\$17 = each boy's share.

Find number of boys.

$\$289 \div \$17 = 17$, number of boys.

Practice problems, page 28, Advanced Arithmetic.

Division and multiplication should precede addition and subtraction. Short methods in division. Pages 184 to 188.

VII.—FACTORS AND MULTIPLES.

Develop the idea, factors of a number. Distinguish between factors of a number and divisors of a number.

Distinguish between prime number and composite number. Beginning with 1, name and learn the first ten prime numbers.

Develop rules of divisibility for 2, 3, 4, 5, 6, 8, 9, 10 and 11.

Find the prime factors in problems 1 to 30, page 34: (1) by inspection where possible; (2) by short division. Develop these two methods of factoring.

Develop meaning of (1) common divisor of two or more numbers; (2) greatest common divisor of two or more numbers; (3) multiple of two or more numbers; (4) least common multiple of two or more numbers.

The G. C. D.

1. Used only in connection with fractions; reduction of fractions to lowest terms.
2. Principles developed:
 - a. The G. C. D. of two or more numbers contains only the common factors. Why?
 - b. The G. C. D. of two numbers is a divisor of their difference, their sum, or any multiple of either number. Why?
 - c. Dividing one number by a number prime to the other does not affect the G. C. D. Why?
3. Methods of finding:
 - a. By factoring. Illustrate.
 - b. By using above principles. Illustrate.

The L. C. M.

1. Principal use with fractions, reducing to common denominator.
2. Principles developed:
 - a. The L. C. M. of two or more numbers must contain all the prime factors, each used the greatest number of times found in any one number. Illustrate and explain.
 - b. The L. C. M. of two numbers is the product of one number and the quotient found by dividing the other number by their G. C. D. Illustrate.
3. Method of finding.
 - a. Factoring. Illustrate.
 - b. By principle (b). Illustrate.

Example: Find the G. C. D. of 10, 25, and 50.

Solution: Eliminate the 50. Why?
 Divide 10 by 2. Why?
 Eliminate the 25. Why?
 The 5 remaining is the G. C. D.

Example: Find the L. C. M. of 16, 72 and 96.

Solution: Eliminate the 16. Why?
 Divide the 72 by 24, the G. C. D. of 72 and 96.
 96×3 , or 288, is the L. C. M.

Problems on pages 34, 35 and 36, Advanced Arithmetic.

VIII.—COMMON FRACTIONS.

Develop the two conceptions of a fraction:

1. A fraction is one or more equal parts of one or a whole unit.
2. A fraction indicates unfinished division.

From the first develop the idea that the unit must first be divided into equal parts; and second, one or more of these parts must be taken.

Develop the unit of a fraction, and the fractional unit.

By means of simple fractions develop the following four principles of fractions:

1. Multiplying the numerator multiplies the fraction.
2. Multiplying the denominator divides the fraction.
3. Dividing the numerator divides the fraction.
4. Dividing the denominator multiplies the fraction.

Give the reasons for each step.

Teach the words numerator, denominator, and terms. Make clear that the numerator is the dividend, and the denominator is the divisor.

From the above four principles it is an easy step to the following:

1. Multiplying both numerator and denominator by the same number does not change the value of the fraction.
2. Dividing both numerator and denominator by the same number does not change the value of the fraction.

Explain each step until reason is understood perfectly. The first one governs the reduction of fractions to a common denominator in addition and subtraction. The second one the reduction of fractions to lowest terms and cancellation.

A fraction should always be reduced to its lowest terms, except for the purpose of adding or subtracting.

To reduce a fraction to its lowest terms divide the terms by their G. C. D. Why?

Practice problems from the state text to illustrate the above.

ADDITION AND SUBTRACTION OF FRACTIONS.

Develop the idea of similar fractions. Why must fractions be reduced to common denominator before addition and subtraction can be performed?

Recall the principles for finding the L. C. M. of two or more numbers. Oral analysis must accompany the solution of problems.

Example: $\frac{1}{2} + \frac{2}{3} = \frac{3}{6} + \frac{4}{6} = \frac{7}{6}$.

Multiplying both terms of the first fraction by 3, and of the second fraction by 2, we have three-sixths and four-sixths, etc.

Add and subtract fractions with small denominators. Why?

Methods for adding and subtracting mixed numbers:

Example: A mat is $28\frac{1}{2}$ in. long and $16\frac{1}{2}$ in. wide; what is the perimeter?

$$\begin{array}{r} 28\frac{1}{2} \\ 16\frac{1}{2} \\ \hline 44\frac{1}{2} \end{array}$$

$2 \times 44\frac{1}{2}$ in. = $89\frac{1}{4}$ in., perimeter.

Add or subtract the fractions first; then units, tens, etc. To subtract the above numbers, the analysis should be, "four-eighths can not be subtracted from three-eighths; then take one unit from the eight units, which equals eight-eighths; add to the three-eighths, making eleven-eighths; four-eighths from eleven-eighths equals seven-eighths," etc.

Problems from state text, pages 46 to 55.

Estimate and check results whenever possible. Fix all principles in the mind of the pupil.

MULTIPLICATION AND DIVISION OF FRACTIONS.

Study pages 216 to 240, Primary Arithmetic.

Review the four principles of fractions in lesson VIII.

Name the two ways to multiply a fraction by a whole number:

$$2 \times \frac{3}{5} = \quad 2 \times \frac{3}{5} =$$

In the first problem can both ways be used? In the second problem? When both ways can be used which should have the preference? Why?

Show that $\frac{1}{3}$ of $\frac{9}{4}$ is the same as dividing the fraction by 3.

Name the two ways to divide a fraction. In the above fraction which method is preferred? Why?

$$\frac{2}{3} \text{ of } \frac{5}{4} =$$

Explain this problem in such a way that the pupil will see that the fraction five-sevenths is to be divided by 3 and multiplied by 2. From the principles, 5 must be divided by 3 or the 7 multiplied by the 3; and the 7 is to be divided by the 2 or the 5 multiplied by the 2. From this the rule for multiplying fractions is made. Give the rule.

All rules should be made by the pupil, then committed. Why? (Give the five steps in teaching.)

Explain multiplication of fractions by means of the divided rectangle.

Develop cancellation. Give principles of cancellation. Problems on pages 65-66.

Mixed number multiplied by an integer:

$$\begin{array}{r} 124\frac{1}{2} \\ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4\frac{1}{2} \\ 1116 \\ \hline \end{array}$$

$$\begin{array}{r} 1120\frac{1}{2} \\ \hline \end{array}$$

Explain. Page 64, state text.

Develop the reciprocal of a fraction. Explain division of fractions by means of (1) the reciprocal; (2) the truth that division is the exact opposite of multiplication.

Treat complex fractions as indicated division of fractions. Page 76. Problems 71, 75, 78 and 80.

IX.—DENOMINATE NUMBERS.

Teach denominata numbers that involve three denominations at a time. Example: For short distances, the inch, foot, and yard; for longer distances, the yard, rod, and mile. Discuss.

Use as many of the standard units in the class as possible. Train the eye and the muscles to estimate results.

Review chapters VI and VII, Primary Arithmetic.

Consult business men and mechanics concerning different measures. For example, a stonemason should be consulted concerning a perch of stone.

Where in every-day life is each denomination used? Name merchandise bought by the foot, the yard, the square yard, the ounce, the pound, etc.

Show the relation between addition of numbers and the addition of denominata numbers; the other operations.

Solve problems, discussing best methods, in reduction, addition, subtraction, multiplication and division of denominata numbers.

Chapter III, Advanced Arithmetic.

X.—DECIMALS.

Chapter X, Primary Arithmetic.

Approach decimals through the table of United States money and the metric system. Use common fractions with ten or some power of ten for the denominator.

In \$111 what does the first 1 on the right stand for? Compare the first 1 with the second; with the third.

In \$.111 what does the first 1 on the left stand for? Compare the middle 1 with the first 1 on the left ($\frac{1}{10}$ of a dollar); the first 1 on the right with the first 1 on the left ($\frac{1}{100}$ of a dollar).

In 1.1 what does the 1 on the left stand for? Compare the 1 on the right with the 1 on the left.

Read and write the exercises on page 112, Advanced Arithmetic.

Reduction of decimals developed and taught. Pages 113, 114, 115.

Make use of the principles of common fractions.

Addition and subtraction of decimals. Pages 116 to 119.

Multiplication of decimals. Pages 120 to 127.

Develop the rule for pointing off in multiplication; use the principles of common fractions.

Division of decimals and reducing common fractions to decimals. Pages 132 to 136. Use principles of common fractions.

Common fractions and decimals in business life. Discuss.

XI.—PERCENTAGE.

Proceed from the known to the unknown. Discuss.

Percentage is based upon simple multiplication, in which the multiplier is either a common fraction or a decimal.

25% of 120 means,

either $.25 \times 120$

or $\frac{1}{4}$ of 120.

First step: Change all numbers with the % sign to either a common fraction or a decimal. All simple aliquot parts of 100 to be changed to a fraction, all others to a decimal. Change all per cents on pages 141 to 145 to decimals and common fractions. Drill on this until clear.

Second step: In solving per cent problems, first change the per cent to either decimal or common fraction, and perform the indicated operation.

1. FIRST CASE: Product to be found:

$$50\% \text{ of } 624 = ?$$

$$\frac{1}{2} \text{ of } 624 = 312.$$

$$22\% \text{ of } 5475 = ?$$

$$.22 \times 5475 = 1204.5.$$

Problems, pages 143 to 151.

2. SECOND CASE: Multiplier to be found. Recall the principle in multiplication, "The product of two numbers divided by one of them equals the other."

Example: \$130 is what per cent of \$2600? Rearrange:

What per cent of \$2600 is \$130?

$$? \times \$2600 = \$130.$$

Solution:

$$\$130 \div \$2600 = .05 \text{ or } 5\%.$$

\$130, the product, divided by \$2600, one number, will give .05, the other number. Change .05 to per cent: 5%.

Problems, pages 152, 153.

3. THIRD CASE: Multiplicand to be found. Same principle as case 2.

Example: \$1.05 is 15% of what number?

$$\$1.05 = .15 \times ?$$

Solution:

$$\$1.05 \div .15 = \$7, \text{ the number.}$$

If pupil has trouble in pointing off the result, decimals should be reviewed.

Problems 154 and 155.

$\$5 \div \100 does not equal 5%, but .05. The true quotient should be written first, either a common fraction or a decimal; then changed to the written form, 5%.

Example: A dealer sold pencils at 5c. each, which gave him a profit of 25%. How much did they cost per dozen?

Statement:

5c. = selling price per pencil.

25% cost = gain.

Find cost per dozen.

$$12 \times 5c. = 60c., \text{ selling price per dozen.}$$

$$\text{Cost} + 25\%C = 125\%C, \text{ or selling price.}$$

$$60c. \div 1.25 = 48c., \text{ cost.}$$

In solving problems with per cents and fractions, all per cents and fractions should be marked. 25% does not equal the gain, but 25%C does equal the gain. If care is exercised here the relation of percentage to multiplication is easily seen.

In the above statement the "25% cost = gain" indicates the operation. If the cost were given the operation would be multiplication, but if the gain were given the operation would be division. Since neither is given we must create an equation in which two known quantities are given. Since the selling price is given in the statement, we make an equation, "125%C = selling price," in which the selling price appears. Remembering the principle of multiplication, "the product of two numbers divided by one of them equals the other," the operation is simple.

Caution: Do not allow such statements as "cost + 25% = 125%, selling price," because it is not true.

Example: After losing 15% of its population a town had 5950 inhabitants. How many had it before losing the 15%?

Statement:

5950 people = population remaining.

15% population = loss.

Find population.

Population — 15% population = 85% population remaining.

5950 people $\div .85$ = 7000 people remaining.

Problems, pages 156 to 164.

Pupils who can not state a problem can not solve it. A statement assists the pupil in seeing the relations.

All %'s and fractions should be marked. Custom drops the marking; as, "A man sold a house or \$1680, at a profit of 20%." What is meant here is "a profit of 25% of the cost." All solutions should be stated in equation form, and every result should be marked. The pupil goes from two known quantities to one unknown.

By substitution in the condition of the problem the relations are often seen.

Example:

25% of a number is 40; find the number.

Change the written form of the per cent to decimal or common fraction, the word "of" to \times , and the word "is" to $=$.

.25 \times number = 40.

The operation is division.

XII.—APPLICATIONS OF PERCENTAGE.**DISCOUNT.**

Care should be exercised in marking the per cent of discount. The trade discount is usually on the marked price, or list price.

Example: If you can buy a \$7 suit of clothes at 15% discount, how much will you pay for the suit, and how much will you gain on the marked price?

Statement:

\$7 = marked price.

15% m.p. = discount.

Find discount and cost.

.15 \times \$7 = \$1.05, discount or gain on marked price.

\$7 — \$1.05 = \$5.95, cost.

The difficulty with these problems is understanding just what is wanted. Drill in the interpretation of the problems.

See that all principles of the four fundamental operations are carried out. Practice marking the per cents. In the 32d problem, page 169, "16 $\frac{2}{3}$ % cost = discount" is the correct interpretation. Since the cost is known, the operation is multiplication.

Two or more Trade Discounts.

Example: Bought goods listed at \$300. Discounts 12%, 5%, 2%. Find the cost.

The difficulty in this problem is, upon what is each discount computed?

Statement:

\$300 = list price.

12% list price = first discount.

5% first proceeds = second discount.

2% second proceeds = third discount.

Find cost.

.12 \times \$300 = \$36, first discount.

\$300 — \$36 = \$264, first proceeds.

.05 \times \$264 = \$13.20, second discount.

\$264 — \$13.20 = \$250.80, second proceeds.

.02 \times \$250.80 = \$5.01, third discount.

\$250.80 — \$5.01 = \$245.79, cost.

Problems 164 to 178.

PROFIT AND LOSS ON PURCHASES.

Principle: The gain, loss, or selling price is *always* some per cent of the cost.

This principle makes the statement and solution of the problem very simple. For example, "gain is some per cent of the cost"; or, "gain = % \times cost."

The operation depends upon what two quantities are known.

Pages 259-262.

COMMISSION.

Principles: The commission is always some per cent of the cost when the agent buys, and of the selling price when the agent sells. The total cost is some per cent of the purchase or selling price. The net proceeds is some per cent of the selling price. Develop these principles.

Pages 263 to 265.

XIII.—INTEREST.

Principle: The interest for one year is always some per cent of the principal.

Interest problems are related to percentage. Explain.

Interest problems are related to cancellation through multiplication.

The cancellation method of solving interest: Reduce the rate to common fraction, and the time to either years, months or days; if to months, divide by twelve; if to days, by 360. Why?

Example: Find the interest on \$300 for 2 yrs. 4 mo. 15 da. at 8%.

Solution:

$$4 \text{ mo. } 15 \text{ da.} = \frac{3}{8} \text{ yr.}$$

$$\begin{array}{r} & & 3 \\ & 1 & 75 \\ 3 \times 2 \times \$300 & \hline 8 \times 25 \\ & 4 & 1 \\ & & 1 \end{array} = \$9, \text{ interest.}$$

To find the exact interest, use 365 days for one year. Problems, page 272.

Study the 6% method on pages 273, 274 and 275, and solve problems.

Banker's short method: Dividing the principal by 100 gives the interest for 60 days at 6%. Develop.

Example: Find the interest on \$500 for 90 days at 5%.

Solution:

$$\$5.00 = \text{interest for 60 da. at 6%}.$$

$$2.50 = \quad " \quad 30 \quad " \quad 6\%. \quad \text{Why?}$$

$$7.50 = \quad " \quad 90 \quad " \quad 6\%. \quad \text{Why?}$$

$$1.25 = \quad " \quad 90 \quad " \quad 1\%.$$

$$6.25 = \quad " \quad 90 \quad " \quad 5\%.$$

Solve problems on page 274 by this method.

To find the rate, time, or principal, the other three terms being given. Pages 280, 281.

Show the relation of simple to compound interest. Pages 299, 300.

Develop accuracy, speed, and neatness in solving for interest.

Demand clear statements and solutions.

XIV.—PARTIAL PAYMENTS—PROMISSORY NOTES.

Under what circumstances are partial payments made? Consult a banker.

How must the note read?

Require pupil to draw the note for partial payment, solve and indorse the payments on the back.

Solve six problems on pages 286 and 287.

Study promissory notes as given on pages 305 to 311.

Inquire at the banks for methods of computing time, etc.

Study the illustrative problem on page 310.

Principle for bank discount: The bank discount is always some per cent of the amount due at maturity. Explain.

Explain methods of paying bills at a distance. Pages 312 to 318.

Study forms of bank and commercial drafts.

Duty and taxes.

a. Specific and *ad valorem* duty. The per cent is computed upon what? Problems, pages 322 and 323.

b. Taxes: Show that taxes do not come under per cent problems.

Example: What is the tax on \$6500 at 5 mills on a dollar?

Statement:

\$6500 = assessed valuation.

\$0.005 = tax on \$1.

Find the tax.

$6500 \times \$0.005 = \32.50 , tax.

Problems, pages 324 to 326.

XV.—INSURANCE, STOCKS AND BONDS.

INSURANCE.

1. Problems in multiplication when rate of premium is stated as a certain sum per each \$100.

2. Problems in percentage when the rate is stated as a certain rate per cent.

Principle: The premium is always some per cent of the face of the policy.

Problems, pages 327 to 334.

STOCKS.

Study the terms used in stock transactions.

What is meant by "stock quoted at 112, brokerage $\frac{1}{8}$."

Why is brokerage added when stock is bought and subtracted when sold?

Problems in stock transactions do not come under percentage. Why?

Study the illustrative problems and solve a few problems on pages 388, 389, 340.

BONDS.

Difference between stocks and bonds.

Study the terms connected with bonds.

Problems in bonds are solved best under percentage.

Principle: The cost, selling price, income or brokerage is always some per cent of the face of the bond.

Example: If I buy a 5% bond at 124%, brokerage $\frac{1}{8}\%$, what is the rate of income on my investment?

Statement:

Let \$1000 = face.

5% F = income. Why?

124% F = cost bond. Why?

$\frac{1}{8}\% F$ = brokerage. Why?

Find rate income on cost.

$$.05 \times \$1000 = \$50, \text{ income.}$$

$$124\frac{7}{8}\% F + \frac{1}{8}\% F = 125\% F, \text{ or total cost.}$$

$$1.25 \times \$1000 = \$1250, \text{ total cost.}$$

$$\$50 \div \$1250 = .04 \text{ or } 4\%, \text{ rate on cost.}$$

The last line in the solution is a problem in profit and loss, and should be explained as such.

Solve problems, page 342.

XVI.—MENSURATION.

1. Lines (one dimension).
2. Surfaces (two dimensions).
 - a. Triangles.
 - b. Quadrilaterals.
 1. Parallelograms.
 2. Trapezoid.
 3. Trapezium.
 - c. Circle and ellipse.
3. Solids (three dimensions).
 - a. Prism.
 - b. Pyramid.
 - c. Sphere.

1. Begin the study of mensuration with the parallelogram. Area equals the product of one side and its perpendicular. See instruction on page 212. Problems, pages 372, 373.

2. From the parallelogram it is an easy step to the triangle. Show the relation between the parallelogram and the triangle, and state a rule for finding the area.

Teach the two meanings of the symbol x . In the expression, 3 ft. \times 4 ft., the character x is a symbol of dimension and not of multiplication. Explain.

Solve problems on page 214.

Rule for area of triangle: The area equals one-half the product of one side and its perpendicular. Why?

3. Trapezoid: By means of a drawing, or with paper and scissors, show that a trapezoid equals a rectangle whose length is the average of the two parallel sides.

Rule: The area equals the product of one-half the sum of the parallel sides and their perpendicular.

Problems, pages 217, 218.

4. Trapezium: Divide the trapezium into two triangles by drawing a diagonal. To find the areas of these two triangles, draw the two perpendiculars from this diagonal to the other two vertices. To find the area of the trapezium, the dimensions of the diagonal and its two perpendiculars must be given.

Develop the rule: The area equals one-half the product of the diagonal and sum of its two perpendiculars.

5. Square root: In connection with the triangle develop the square root. See pages 357 to 366. Teach the hypotenuse.

6. Circle: Relation of diameter, radius, and circumference. Pages 377, 378.

Area: Study the development on page 379. Problems, page 380.

7. Ellipse: Area equals the long radius times the short radius times π . Illustrate.

SOLIDS.

1. Prisms: Development on page 219 and 381.

Rule: Volume equals the product of the area of one side and its perpendicular. Develop this rule.

Problems, pages 221 to 222 and 381 to 385.

2. Pyramid: Develop the relation between the volume of a prism and the volume of a pyramid with same bases and heights. See instruction, pages 386 and 387.

Convex and total surface of prism and pyramid. Pages 384, 388 and 389.

3. Sphere: Surface and volume. Pages 390, 391.

Solve problems, pages 392 to 394.

4. Cube root by the factoring method. Page 395.

PRACTICAL MEASUREMENTS.

1. Board measure. Page 33.

2. Plastering, papering, and carpeting. Page 227.

Longitude and time. Chapter VIII, page 241.

Proportion and similar figures. Chapter IX, page 249.

GEOGRAPHY.

In addition to the work here outlined it is required that Sutherland's *The Teaching of Geography* be read by all the members of the class and be discussed in regular recitations.

The following books are also especially recommended for reference: King's *Methods and Aids in Geography*, published by Lothrop, Lee & Shepard Co., Boston; McMurry's *Special Method in Geography*, published by Macmillan Co., Chicago.

1. In the room: (a) A large picture. (*Primary Geography*, pages 1, 87, 94, etc.) Learn the names for different parts of a picture. How many objects in each part? The most important object? (b) Study specimens to tell what is seen, such as a piece of coal, a leaf, grains, fruits, etc.

Describe the schoolroom, playgrounds, the home garden.

2. *Outdoor Observation*: A tree; parts of the tree; fruit, etc. Visit a place near the schoolhouse and describe it carefully, such as a small field, a mill, a foundry, a store, a church.

Make and record observations of the weather.

3. *Local Geography Begun*.—An excursion farther away to observe type forms—land forms, like a hill, a valley; water forms, like a pond, a brook, a river, etc. (*Primary Geography*, pages 1-5.)

Methods.—Draw a map of a field observed. Tell in order objects noticed in the field. Visit other fields and report to teacher. Write out what is to be seen in a picture. Describe an apple, a horse. Draw a plan of the schoolroom (*Primary Geography*, page 15), school yard.

References.—*Type Studies*, McMurry; *Home Geography*, Fairbanks; *Field Work in Nature Study*, Jackman; *Methods and Aids in Geography*, King; *Suggestive Lessons in Geography*, King.

MAP MAKING AND READING.

1. Draw a plan of the schoolroom to scale; the yard. (Pages 15 and 16.) Study first the principal streets or roads near the schoolhouse. Make a map of the same on paper. Use in a general way a scale suitable, as, one inch to a quarter of a mile. Print a few names of streets or roads on the map. Place the schoolhouse in its proper position, also the church or farmhouse and other buildings.

2. Walk through the streets or along the roads and notice slopes, elevations, and general features of surface. Observe in what directions water flows after or during rain.

3. Make a second map, adding contour lines, each line showing levels five, ten or twenty feet apart. Explain the meaning of the lines. If the space between the contour lines were filled in with a different color for each space, what kind of land would be represented by each color? What does color mean on a physical map? Find the lowest point on the map; the highest. From the western side of the home town to the eastern boundary line, does the surface slope up, or down? What is the slope of a still body of water? Of a river? How does the land slope from the eastern boundary of Kansas to the western? What is the meaning of color on a political map? What shows how the land slopes on such a map? By what kind of lines are mountains indicated?

Explain the meaning of \oplus , \odot . 42° . Learn how to use the scale.

Explain the relief map of North America (*Primary Geography*, page 26). Make one of plasticine.

References.—Methods and Aids in Geography, King; Suggestive Lessons in Geography, King; Special Method, pages 1-41, McMurry; Government Maps by the Geological Survey, Washington, D. C.

READING AND JOURNEY GEOGRAPHY.

Use maps or globes to illustrate. (Primary Geography, Part III.)

1. Take an imaginary trip to Topeka, St. Louis, or Chicago. Study situation, on what water, size, people, streets, important buildings, great industries, commerce, growth, etc.

2. Read and talk over other journeys to New York, Washington, down the Mississippi, to London, Paris, Venice, St. Petersburg, up the Amazon, across the Alps, through the Mediterranean, to Cairo, to Chinese and Japanese homes, to see village life in India, Australia and the Philippines.

Methods.—Write letters home from these places. Use railroad folders. Draw routes taken on journeys. Raised maps and raised globes.

References.—Special Method, pages 42-198, McMurry; Home Geography, McMurry; Picturesque Geographical Readers, King.

1. The Air.—Composition. Effect of heat. In motion. Evaporation. Condensation. Moisture in air. The circle of the rain. (Primary Geography, pages 5 and 6.) Rains, streams, oceans. [All in a very simple way.]

2. The four seasons studied. Different lengths of day and night. Different degrees of cold and heat; simple explanations given.

3. Direction—right and left. Rising and setting sun—shadow at noon. Compass.

4. Soil—loam, gravel, sand and clay; appearance and use of each. Crops.

Methods.—Take children into the yard at noon to notice length and direction of shadow; compare with compass. Excursions for material, such as soils. Observations of rain during a rainfall and its action on the ground. Measure rainfall by using a can or pail.

References.—Physical Geography by Dryer, Physical Geography Reader by Dodge, Child and Nature by Frye, Home Geography by Tarr, Talks about the Soil by Barnard.

GENERAL FEATURES OF THE EARTH.

(Grammar-school Geography.)

1. A globe, a map, a section, hemispheres, continents, grand divisions, land and water hemispheres. Size of grand divisions. Plains, prairies, and the people upon them.

2. Study elevations, a range, a mountain like Pike's Peak, a valley like the Mississippi river valley.

3. Slopes. The coast. Coastal plain.

4. Tides. Currents. The Gulf Stream.

Methods.—Take the class to the top of a hill or along a stream. Take an imaginary trip to the top of a celebrated mountain, like Pike's Peak. An imaginary trip down the Kansas river, or the Mississippi river. Sketch the grand divisions in order of size. Draw map of Gulf Stream. Give a lesson on the globe. Use maps freely.

References.—Other geographies, Mill's International Geography, Physical Geography by Gilbert & Brigham, Davis, Tarr, etc., Aspects of the Earth by Shaler, Suggestive Lessons by King.

LIFE.

1. *Vegetable Life*: Variety near home. Three plant zones. Trees in different zones or belts. Trees in Kansas. Difference in the appearance of a tropical and a temperate forest. Vegetation affected by heat, moisture, dryness, height. Six life regions.

2. *Animal Life*: Domestic animals. Wild animals near home. Affected by climate. Different animals in the polar, temperate, and tropical regions. Difference in habits. Six regions of animal life. Useful and harmful animals. Birds. Fish.

3. *Human Life*: Different races living near the school; in the town.

a. Caucasian race: Characteristics. Subdivisions of the White race. Noted men of each subdivision. Difference in habits of English and Americans; Germans and French, etc.

b. Black race: Peculiarities in looks, habits, ideas, etc. Noted representatives.

c. Yellow race. Brown and Red races. Map of the races. Religions. Governments.

Methods.—Describe wild animals near home. Describe domestic animals seen in the town. Draw race map, animal map, etc. Make a list of wild flowers and trees near home. Describe flowers raised in home gardens.

References.—The First Book of Birds, Miller; Ocean Wonders, Damon; The American Natural History, Hornaday; Our Native Trees, Keeler; Leaves from Nature's Story Book, Kelley; Bird Studies with a Camera, Chapman; Strange People, Starr; American Indians, Starr; Big People and Little People of Other Lands, Shaw.

TRANSPORTATION.

1. *By WATER*: Rafts, rowboats, sailboats; increases in size; seven-masted schooners; steamers; material—wood, iron, steel. Present length (700 feet). Good harbors.

By Rivers: Navigable. Fall line. Difference between rivers of Africa and those of Europe. North American and South American rivers.

By Canals: Important ones, such as the Erie and Welland. Drainage at Chicago. Panama; "Soo"; Suez; Manchester; Kiel.

Noted water routes in the United States. Atlantic routes; Pacific routes.

2. *By LAND*: Wheelbarrows, jinrikishas, bicycles, automobiles, carriages, sleds. Steam railroads: Locomotives, air brakes, safety appliances, steel rails, viaducts, bridges, signals, time-tables. Express companies. Mail. Commodities transported.

3. *CAUSES AFFECTING TRANSPORTATION*: Influence of physical conditions. Exchange of goods; products; rates, influences of cheap and quick transportation.

Methods.—Local commerce and transportation in the home town or city; in Kansas; center of business; routes of trade; main streets; stores; factories.

References.—Commercial Geography, Redway; Commercial Geography, Adams; American Railroads; The World's Work.

WEATHER.

1. Observations; Weather Bureau; weather maps; reading weather map. Movements of storms; westerlies; cyclonic storms; studied from weather maps.

2. *CLIMATE*.—The weather changes. Definition of weather; of climate; dry climate; rainy climate; continental climate; oceanic climate.

Causes: Latitude; altitude; zones of heat; influence of water; humidity; winds—westerlies, trade winds; calms; ocean currents; mountains. Rainfall.

Methods.—Observation of weather. Study and use of Weather Bureau maps. Practice telling the climate of a given place from an outline map, applying causes affecting climate. Compare results obtained with those given in textbook.

References.—Climate of North America; King's Methods and Aids; physical geographies; Davis's Meteorology.

3. LATITUDE AND LONGITUDE.

4. STANDARD TIME.

a. The earth as a whole. The earth and other planets. The solar system.

b. Daily motion. Yearly motion. Inclination of the axis; results; the four seasons; unequal length of day and night; equinoxes; zones. Meridians and parallels on a globe.

c. Explain three causes of the change of seasons. Poles, circles.

Methods.—Darken the schoolroom. Allow sunlight to enter through a small hole. Hold a hand globe in the rays, and by inclining the axis show how the sun lights up certain parts. Draw a diagram to illustrate change of seasons.

References.—Geographies; astronomies; Astronomical Geography, Jackson; Methods of Teaching Geography, Croker; Mathematical Geography, Johnson.

NATURE'S PREPARATION FOR MAN.

1. Changes in the earth's crust. Cooling and folding. Building up of North America.

2. Volcanoes: Mts. Pelee, Krakatoa, Vesuvius, etc. A typical volcano: Causes; effects. Map of volcanoes.

3. Earthquakes: Effects.

4. Weathering, erosion, river, ice; a talus.

5. Flood plains.

6. Glaciers; a crevasse; moraines. Ice sheet; effects; drumlin; eskers. How has nature prepared the earth for life?

7. Man's influence on nature.

Methods.—Draw a typical volcano. Government map of Shasta, Cal. Make a volcano of clay, putty or plasticine. Visit rivers in Kansas and notice effect of erosion, flood plains, overflow. Use Curtis's Geographical Models. (Mass. Sales Co., Boston.)

References.—Physical geographies; Russel's North American Volcanoes; Wright's Ice Age; Well's Realm of Nature; Earthquakes, by Dutton; Story of Our Continent, Shaler; Man and Nature, Marsh.

KANSAS.

1. What people live in Kansas? What races? From what countries are they? Where is the state most thickly settled?

2. Cities.

3. Leading occupations. Great industries.

4. Resources.

5. Important railroads. Commerce. Education. Government.

6. General features. Central position. Area. Boundaries. Surface. Drainage. Irrigation. Climate. Soil. Striking characteristics of the state.

Methods.—Draw a political map. Print on it the productions. Consult government map on sand dunes, Kinsley, Kan. Draw a physical map in colors; soil map. Study the state by topics. Compare Kansas with Missouri. Imaginary trip across the state.

References.—Different geographies; Bulletin No. 155, "Alfalfa," published by the Agricultural Experiment Station, Manhattan; state documents.

NORTH AMERICA.

1. Position. Parts. Canada and the United States; characteristics. Surface of the United States; its drainage and climate. World power. Groups of states, territories, dependencies.

2. CENTRAL STATES: People compared with the Southern people. Leading cities. Each noted for what? In what part is Kansas?

3. Three other leading states in this group. Study each briefly with reference to its leading characteristics. The great industries of the group. Agriculture: the wheat and corn belts. Mining. Manufacturing. Important products. Domestic commerce and transportation. Railroads.

4. Causes producing the above conditions. Position. Surface. Drainage, lakes, canals. Climate. Education.

Methods.—Single-sheet map of United States by U. S. Geological Survey; consult government maps on meandering rivers; maps by Mississippi and Missouri River Commission, St. Louis, Mo.; use blackboard cloth outline map; study by above topics; use Heath's Progressive Outline Maps; on them make a commercial map; pictures of cities and industries; Underwood & Underwood's stereographs; imaginary trip down the Mississippi river; across the Mississippi valley on a leading railroad route.

References.—Other geographies; physical geographies; Suggestive Lessons, King; Lakes of North America, Russell; National Geographic Magazine; The World's Work; Canada in the Twentieth Century, Bradley; Natural Resources of the United States, Patton; Methods and Aids in Geography, King; The Great American Plateau, Prudden; Practical Physiography, Fairbanks.

5. WESTERN STATES: California. Gold and silver mining. Deserts. Irrigation. Pacific ocean. Commerce. Surface. Drainage. Climate. Government maps, such as plateaus, Price river, Utah, Lamar, Granada, Colorado.

6. SOUTHERN STATES: People. Texas and Georgia. Cotton. Sugar. Rice. Coal and steel. Cotton manufacture. Mexico. West Indies. Panama. Government map of Mt. Mitchell.

7. ATLANTIC STATES: People. Pennsylvania and New York. Washington. Philadelphia. New York. Manufacturing. Mining. Foreign commerce. Government map of shore lines, as Sandy Hook, Barnegat, etc.

8. NEW ENGLAND STATES: People. Puritan element. Massachusetts. Boston. Manufacturing. Fishing. Education. Government map of drowned valleys, Boothbay, Maine.

SOUTH AMERICA.

1. Striking features. Sections (political map). The three great republics—Brazil, Argentina, Chile. Their cities. People in each.

2. Coffee and rubber in Brazil. Selvas. Tropical vegetation. Amazon system.

3. Cattle on the pampas and llanos. Wool and sheep in Argentina. Progressive country.

4. Nitrate and copper in Chile. Recent growth of this country.

5. Smaller republics. Interesting places.

6. General features and causes. Andes and Brazilian systems of elevation. Plains, rivers. (See relief map.)

7. Climate; vegetable and animal life; races; mining; products; commerce; government; religion; growth.

Methods.—Compare Brazil with the United States. Compare the Amazon with the Mississippi; the Andes with the Rockies. Use wall map and globe. Use cloth outline blackboard map in developing coast, surface, and drainage. Use Underwood & Underwood's stereographs of South America and other countries. Pictures and slides. Specimens of coffee berry,

raw rubber, cinchona, cacao bean. Draw commercial map of South America. Represent production of coffee and wool thus:

Coffee: World _____
 Brazil _____
 Wool: World _____
 Argentina _____
 United States _____

References.—Other geographies; Our American Neighbors, Coe; The Great Mountains and Forests of South America, Fountain; Round and About South America, Vincent; South America, Herbertson; South America, Carpenter; The Bolivian Andes, Conway; Through the Republics, Marten; Geographical Reader, Rupert.

EUROPE.

1. British Empire. Parts. Peoples. Cities. Industries. World commerce. Navy products.
2. General features and causes. Central position. Size. Surface. Drainage. Climate. Education. Culture. Government. Colonies.
3. Other great countries in a smaller way. France. The French peasants. Paris. Vine growing, etc. German Empire. Industries. Berlin, etc. Austria-Hungary, Italy, and Russia. Other smaller powers.
4. Eurasia. General features of Europe—surface, elevations, plains, drainage. Climate. Industries. Commerce. Products. Governments. Religions. Art. General intelligence.

Methods.—Apply theoretically the causes affecting climate to the western side of Europe. Write down results and compare with the statements in the geography.

Review a country like Germany by comparison with other countries. Draw a commercial map of Europe.

Use constantly the product comparison, and commercial maps given in "Review of United States" near end of grammar-school text.

References.—Suggestive Lessons, King; Methods and Aids in Geography, King; Picturesque Geographical Reader No. 6, King; Among English Hedgerows, Johnson; How London Lives, Gordon; Along French Byways, Johnson; France of To-day, Wendell; German Life in Town and Country, Dawson; Russia Described by Famous Writers, Singleton; Our European Neighbors (several volumes); Modern Europe, Coe.

ASIA.

1. Eurasia (relief map). Chief characteristics. Most important countries.
2. India: The people, their habits and customs. Calcutta and other cities. Industries. Commerce. General features—shape and coast. Surface. Drainage. Soil. Climate. Religions. Government. Education.
3. China, following a similar set of topics.
4. Japan.
5. Siberia.
6. Other countries of Asia.
7. Summary and general features of Asia—shape, coast, surface. "Roof of the world," "The abode of snow." Drainage, climate, life.

Methods.—Compare China with Japan; the Alps with the Himalayas; Europe and Asia; the size of India and France. Draw a commercial map of Asia, a profile from north to south; a rainfall map. Write out the geography of Japan or some other country. Write a letter home from an Asiatic city, as Benares.

References.—Little People in Asia, Miller; Asia, Carpenter; Readers, Youth's Companion series; Chinese Characteristics, Smith; A Bird's-eye View of India, Stevens; Japan as We Saw It, Gardner; Through Asia, Sven Hedin.

AFRICA AND AUSTRALIA.

1. Characteristics of the grand division. Four parts.
2. Arabs, Negroes, Whites. Subdivisions.
3. Alexandria, Cairo, Cape Town.
4. Northern section. Egypt. People. Ruins. Suez canal. Desert.
5. Interior. Rubber and ivory.
6. South Africa, Dutch, etc. Gold, diamonds, wool. Important places in each section. Mining. Products. Commerce of each section.
7. General features—shape, coast line, elevations, plateaus, drainage. Great rivers and their peculiarities; the Nile—its peculiarities. Irrigation. Climate. Mohammedan religion.
8. Animal life. Sport. Present conditions. Colonies.
9. Australia and the Pacific groups of islands, topically studied. Atolls. Volcanoes. Coral reefs. Gold, wool, copra.

Methods.—Study Egypt and South Africa topically. Compare the Nile with the Mississippi.

Review by having each pupil put on the map as many facts as possible. Write letters from interesting places to the folks at home. Make production maps.

Let each one make out ten good questions for review.

Illustrate facts thus:

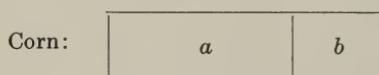
Gold production: World	_____
South Africa	_____
United States	_____

References.—Africa, Herbertson; A Thousand Miles up the Nile, Edwards; Present Day Egypt, Penfield; The Building of the Nile, Peel; Actual Africa, Vincent; Impressions of South Africa, Bryce; Australia, Old and New, Grey; Australia, Carpenter; The Heart of Australia, Gregory.

INDUSTRIES.

1. United States: Leading products; agricultural sections in the West, South, East; manufacturing centers; where situated. Mining—West or East? What products? Fishing—kinds of fish caught. Lumbering—where carried on.
2. Industries of the world. Tropical products. Temperate products.
3. Commerce—domestic. Commercial routes in United States. Railroads, canals. Commercial centers in North America.
4. Foreign commerce. (Commercial map.) Navigation. Great commercial routes. Chief of articles of foreign commerce.
5. Centers of commercial activity in the United States. Greatest seaports in the world.

Methods.—Use Heath's outline map of the world. Trace great commercial routes. Name noted seaports. Print leading exports of each country. Draw diagrams as in Redway's Commercial Geography:



a United States. b Rest of the world.

Use wall map of the world—Mercator's projection. Print on it facts learned. Make a list of ten leading exports; ten leading imports.

References.—Commercial geographies; Redway, Adams, Chisholm, Trotter. Expansion, Strong; Our Country, Strong; Industries of To-day, Rocheleau; Coal and Coal Mines, Greene; Anthracite Coal Industries, Roberts; The American Railway; Workers of the Nation (2 vols.); World's Work; The Soil, King; Practical Agriculture, James; By Land and Sea (Companion series); Man and His Markets, Lyde.

GRAMMAR AND COMPOSITION.

ANALYSIS. *Five Weeks.*

(Gowdy's English Grammar, Part One.)

The sentence and its essential elements.—The declarative sentence: Its nature; its essential elements, subject, copula, predicate attribute. The interrogative sentence. The imperative sentence.

Important elements of some sentences: Object, predicate, attribute of the object.

The adjunct.—Classification according to use; classification according to form.

Compound elements and the coördinate conjunction.

Special study of word adjuncts.—The adjective; the adverb, the noun and pronoun used as adjuncts.

The prepositional phrase.

The adjective clause.—Kinds, limiting and purely descriptive; connectives, the conjunctive pronoun and the conjunctive adverb.

The adverbial clause.—Kinds; connectives, the conjunctive adverb and the subordinate conjunction.

The noun clause.

The independent elements.

Analyze sentence from the text.

Discuss the value of analysis. Should we do less diagramming and more oral analyzing? Why? Give the advantages of each.

PARTS OF SPEECH. *Five Weeks.*

(Scott-Southworth's Lessons in English, Book Two, Part Two.)

NOTE.—Before Part Two of Scott-Southworth's second book is taken up, a week should be devoted to the consideration of Part One, in order that the pupils may become acquainted with this portion of the book as well as for the purpose of comparison with the corresponding part of Gowdy already studied. To this end the following suggestions on the first five chapters are inserted:

CHAPTER I. The main object of this chapter is to introduce the pupil to the sentence as a unit of speech. Emphasize the difference between groups of words that are sentences and groups of words that are not sentences. The three-fold classification of sentences is easily perceived by the pupil and will prepare him for the more difficult classifications that follow.

Do not let the pupil get the idea that a sentence exists only or mainly in a book. Insist upon original examples drawn from his own observation. If necessary, send him to the window or to another room, and ask him to report on what he sees. Only by making the study concrete at the start can the usual parrot-like repetition of the text be avoided. Encourage the pupils also to bring in examples from newspapers, magazines and books that they are interested in.

CHAPTER II. Here begins the analysis of the sentence with the all-important distinction of the subject and the predicate. Simple as the distinction seems, it is rarely comprehended by pupils of this grade, even after they have learned to make the mechanical division. Considerable time and not a little pains and ingenuity, therefore, may be profitably spent in fixing the idea firmly in mind. If the teacher can make the pupil conceive of the sentence as an organic whole, with members that have different kinds of work to do, the foundation will be laid for mastering all the subsequent grammatical relations.

The following is a useful exercise: Read to the class a short and simple passage of poetry or prose. Then ask, What is the writer talking about? When this question has been answered in a single noun, write the word on the board and draw a vertical line after it. Then ask, What does he say about it? A little adroit questioning will bring out a single verb, which can be written on the board after the vertical line. Then point out that the word before the line is the subject of the sentence, the word after the line the predicate. This exercise should be many times repeated until the relationship of the two parts to each other and to the sentence as a whole is firmly grasped.

The office of the modifiers may be taught in the same way.

Make frequent use of sentences composed by the pupil and of sentences from their reading.

Do not be satisfied with mechanical answers. Make sure that the pupils *feel* the relationship of the object to the predicate and of the modifiers to the words they modify. Dwell especially upon the uses of these parts in bringing out the complete thought.

CHAPTER III. The term *Parts of Speech* is frequently misunderstood. Try to discover what ideas the pupils attach to it, and clear up all misconceptions. Throw emphasis upon the different kinds of work that each part of speech has to do in expressing the thought of the sentence.

To teach the use and value of pronouns, dictate a passage of some length in which nouns are substituted for all the pronouns. Then require the pupil to write the proper pronouns over the nouns and note the improvement in clearness and brevity.

Sec. 49. Do not begrudge time spent on the *antecedent*. See that the word is understood, and drill the class until all can make the reference quickly and unerringly.

Sec. 57. It can not be too often repeated, that the class into which a word falls is determined not by its form but by its use. Drive this idea home.

Secs. 59-64. Do not spend too much time on the kinds of adjectives. The classification is interesting, but it is not so important as other things in this chapter.

Take plenty of time for this chapter and review it carefully with the aid of the summary.

CHAPTER IV. Throughout this chapter work steadily from the simple to the more complex. Try to make the pupils realize that a sentence is a composite structure in which the essential elements are added to or modified in one way or another to complete the whole. Do not let them at any time lose sight of the simple underlying framework.

Do not let the definitions get the start of examples. Begin always with examples. See that their meaning is clear and their force appreciated. Then let the definition follow as a convenient description of what is actually present in the sentence.

The various complements are rarely distinguished with sufficient clearness. Ply the pupils with examples until they perceive the difference in use. Do not mistake glibness in reciting definitions for real grasp of underlying notions. See that all vagueness is cleared away before the next subject is taken up.

Sec. 128. Use this outline to review the preceding sections.

Secs. 137-145. The essential idea here is the fact that the clause does the same work in the sentence as the adjective or the adverb. Make this clear before going on.

Sec. 164. Use the summary in reviewing 130-163.

CHAPTER V. Properly conducted, sentence-analysis is one of the most useful forms of mental exercise. To be of any value, however, it must start from the idea of the sentence as a whole. Use only sentences that the pupil can grasp in their entirety, and at every point in the analysis make sure that he understands the relation of the part to the whole. Do no accept a mere formula as evidence that the process of analysis is proceeding satisfactorily. Ask questions that will draw out what is in the pupil's mind. Often the simplest method of ascertaining whether the pupil really knows what he is doing is to ask him to read the sentence aloud.

CHAPTER VI: Beginning with this chapter the various parts of speech are taken up in detail. The particulars under this head are so important and lend themselves so readily to routine drill that there is danger of the larger principles being forgotten. It is well, therefore, to bring in at intervals exercises in sentence-analysis and reviews of preceding chapters.

Secs. 183-186. Do not dwell long upon these distinctions.

Sec. 220. This, one of the most difficult parts of English grammar, calls for both knowledge and common sense. Whatever method is adopted, pains should be taken to see that the pupil is not confused.

Secs. 242-247. Emphasize the fact that parsing is only another kind of analysis, in which the sentence is separated into still smaller elements.

Opinions differ as to the value of parsing and the extent to which it should be carried as a drill. The wise teacher will use it with moderation, stopping at the point where it threatens to degenerate into a mere clutter of meaningless phrases, and always testing carefully the pupil's understanding of the formula. In general it may be said that the simplest form of parsing is always the best.

Sec. 249. Use the summary for reviewing the chapter.

CHAPTER VII: Review pp. 18-20. The pronoun presents peculiar difficulties, partly because pronouns have a great variety of uses, some of them idiomatic and apparently illogical, and partly because a feeling for the finer uses of the pronoun is in most cases lacking. Interesting examples of good prose or poetry and much repetition of the right form are the most effective aids in meeting these difficulties and overcoming them. It is well to go slowly.

Sec. 264 (c). Do not let the pupils get the idea that the omission of the relative is wrong or ungrammatical.

Sec. 288. The distinction between these two forms is rarely understood.

Secs. 297-303. Pay especial attention to the relation of the pronoun to its antecedent. Make the pupil see how this relation serves to link together the parts of the sentence.

Secs. 304-310. Many repetitions will be necessary in order to fix the case-forms in mind and make their right use part of the pupil's daily speech. Exercise 162, being especially useful for this purpose, should be returned to at intervals.

Sec. 313. The terms restrictive and coördinate will be useful later. See that they are understood.

CHAPTER VIII: Review pp. 24-27.

Secs. 316-321. Do not spend too much time on this part of the chapter.

Sec. 326. A bit of historical grammar at this point will make the list interesting and serve to fix the irregular forms. See O. F. Emerson's History of the English Language, or the excellent treatment of the subject in R. Morris's Historical Outline of English Accidence (Macmillan), pp. 107-110.

Secs. 336-345. The errors here cited are common and persistent in the speech of both young people and adults. Now is the time to root them out if possible, or if not, at least to make a beginning.

CHAPTER IX: Review pp. 20-23, 43-54.

This being the longest and hardest in the book, and also being of prime importance, will naturally occupy the greater part of the year. In the teaching of the verb, keep in mind that many of the definitions, distinctions, and principles call for a rather high grade of thinking. They present abstractions that young people can not be expected to grasp at once. Therefore the work should proceed deliberately and much use should be made of concrete illustration. Here is the point where the teacher must be especially vigilant in order that memorizing of the text may not take the place of understanding of the principle.

Sec. 363. Avoid giving the pupil the idea that the irregular verbs are inferior in some way to the regular.

Sec. 363. Review Exercise 181 at intervals, introducing other verbs.

Sec. 383. Take pains to see that the term Principal Parts is understood.

Sec. 384. Exercises 187 and 188 may be repeated now and then with profit.

Secs. 420-430. Take plenty of time for this difficult part of the chapter. Use examples freely before calling for the definitions and principles. Exercise 198 will be found especially useful for fixing the meanings of the various kinds of phrases.

Sec. 433. Use the summary for a thorough review.

Secs. 434-461. Time devoted to these sections will be well spent. The exercise should be many times repeated.

CHAPTER X: The subject matter of this chapter needs careful illustration and explanation. Pupils usually mistake the gerund for the present participle, and are frequently bewildered by the many uses of the infinitive. The summaries in sections 478 and 492 will assist in clearing up this confusion.

Secs. 487-488. The features in which the two participles differ should be clearly understood. The past participle always gives trouble.

CHAPTER XI: The grammar of adverbs, being comparatively simple, presents few difficulties. Pupils are sometimes confused, however, by the fact that noun clauses and adjective clauses, as well as adverb clauses, may be joined to the rest of the sentence by means of conjunctive adverbs. See that there is no misunderstanding on this point.

Sec. 505. Phrase adverbs are so numerous and occur so frequently that special attention may be drawn to them. Emphasize their use.

Sec. 514. Make a special attack upon *most* in the sense of *almost*.

CHAPTER XII: The prepositional phrase is the starting point for the study of the preposition. Make clear the difference between prepositions and conjunctions, and between prepositions and such adverbs as are mentioned in section 521.

CHAPTER XIII: Sec. 526. The distinction between coördinating and subordinating conjunctions is important. Be sure that the terms are understood.

Sec. 534. The classification of adverb clauses is useful. It should be committed to memory.

CHAPTER XIV: Though not so important for technical grammar as the other parts of speech, interjections are extremely interesting. An agreeable hour may be spent in examining and classifying interjections that the pupils have picked up in conversation or in their reading.

CHAPTER XV: By means of the summaries in this chapter the essential features of the entire book may be conveniently passed in review. Pupils should be required to memorize the outlines and be prepared to write them on the board when asked to do so. Then, by means of suitable questions on each catchword, the details under the various heads can be brought out. In this way an impression may be gained of the whole system, or logic, of the subject. Emphasis should everywhere be thrown upon the *structure* of the sentence and the *use* of its various elements.

In the course of the review try to discover what parts of the subject are still obscure. Go over these parts again and again, until all misconceptions are removed. It is hardly necessary to advise that plenty of time should be allowed for this review. It is the most important feature of the year's work.

COMPOSITION. *Two Weeks.*

(Scott-Southworth's Lessons in English, Book Two, Part Three.)

Part III of Book II contains a course in English composition. This may be (1) taught just as it stands, (2) interspersed with lessons in grammar, or (3) used as materials for composition work, the teacher making her own selections and pursuing any order she chooses. If the last named method is adopted, the following suggestions may be helpful:

The object of the work in composition is to enable the pupil (1) to talk or to write freely and correctly, as well as intelligently, within the range of his knowledge, (2) to give sound reasons for the forms of expression that he uses, and (3) to discriminate fairly well in his choice of words. This three-fold object can be attained only by frequent exercise, both in speaking and in writing, upon a great variety of subjects and in a considerable variety of forms. The exercises should be supplemented by constant attention to the forms of speech used in the daily recitations.

The best subjects are such as (1) are drawn from the pupil's own experiences, observation, or thought, (2) are within the range of his powers, and (3) arouse a spontaneous interest. If pupils are interested in music, let them write on music; if they are interested in pet animals, let them write on that subject. The teacher should be constantly on the alert to discover new subjects on which individual pupils will be eager to write or to speak.

The forms of composition most useful are letters, narratives, and descriptions. To these may be added simple explanations, and arguments upon questions about which the pupils have decided opinions.

Study Lessons I-III for the uses of capitals, punctuation, and quotation marks.

SYNONYMS. Use Lessons IV and V. Properly taught, this study will greatly increase the vocabulary of the child. Words, however, should always be used in connection with other words, and whenever possible this study should be connected with the pupil's reading, writing, and speaking. Teach the use of the dictionary in looking up the meanings of words, but be sure that the definitions are understood.

CHOICE OF WORDS: Lessons VI-XII.

LETTER WRITING. Most of the written exercises of whatever kind may take the form of letters, thus affording practice in the use of correct forms.

Review the technical features of the letter form by means of Lessons XIII, XIV and XIX, selecting the essentials. Give variety to these exercises by utilizing current happenings in the school.

NARRATIVE WRITING. Study Lessons XX-XXIII and use the subjects on pages 283 and 284, supplementing them by others drawn from current events. In connection with Lesson XXII, call for the best story that the pupil knows and let it be told orally. Have all members of class write stories.

DESCRIPTIVE WRITING. Study Lesson XXX and assign a few exercises drawn from personal observation of nature. Try to cultivate keenness of observation and accuracy in noting the facts observed. The letter form will be useful here. If additional exercises in description are desired, Lessons XXXVI-XXXVIII will furnish an abundance of good subjects.

READING.

This outline on reading was prepared by A. A. REED, and is based upon Sherman and Reed's Essentials of Teaching Reading, 1909 edition.

INTRODUCTION.

The following forty-four lessons in reading have been planned to meet the requirements of the course in normal training and are based on the experience of classroom work. Each lesson is to have approximately three minutes given to technical drill on articulation or on the use of diacritical marks, five minutes to memory recitations, twelve minutes to the discussion of the text, and twenty minutes to oral reading.

The selections for memorizing are given in such numbers that members of the class may have different assignments. Some of the shorter ones should be memorized by all, especially those by Robert Louis Stevenson. Each member of the class should memorize one short and one long poem a week. C. G. V. stands for Child's Garden of Verses, P. for Penniman. References by figures only are to the volumes of Graded Poetry.

It is not intended that all questions for review should be discussed. These contain the essence of the chapter. They serve as guides to the pupil in studying the lesson. Generally it will suffice to discuss the ones that need more light. It is a good plan to have the pupils prepare to write the outline of the chapter. It is a helpful feature in preparing the lesson. Occasionally a few minutes may be taken for the reproduction of this outline from memory before beginning the discussion.

The outline of American authors is given to assist the pupils in securing a correct localization of the writer in point of time, as well as a view of their relative rank. The class should memorize the outline for the general information contained. It will not be necessary to spend time discussing it, except as it comes in naturally with the poems memorized.

AMERICAN AUTHORS.

- A. Colonial period. (1607-1765.)
 - John Eliot, Cotton Mather, JONATHAN EDWARDS.
- B. Revolutionary period. (1765-1789.)
 - a. Prose: BENJAMIN FRANKLIN, THOMAS JEFFERSON, James Madison, Alexander Hamilton, John Adams.
 - b. Poets: John Trumbull, Francis Hopkinson.
 - c. Orators: Patrick Henry, Josiah Quincy.
- C. Period of the republic. (1789 to present time.)
 - 1. National beginnings. (1789-1815.)
 - a. Poets: Francis Scott Key, Joseph Hopkinson.
 - b. Biographers: John Marshall, William Wirt.
 - c. Essayists: Thomas Paine, Noah Webster.
 - d. Orators: Fisher Ames, John Randolph.

C. Period of the republic. (1789 to present time.)—*continued.*

2. Golden age. (1815-1870.)

- a. Poets: WILLIAM CULLEN BRYANT, Joseph Rodman Drake, Fitz-Greene Halleck, EDGAR ALLEN POE, JOHN GREENLEAF WHITTIER, HENRY WADSWORTH LONGFELLOW, Alice and Phoebe Cary.
- b. Historians: William H. Prescott, George Bancroft, John Lothrop Motley.
- c. Essayists: WASHINGTON IRVING, RALPH WALDO EMERSON, JAMES RUSSELL LOWELL, OLIVER WENDELL HOLMES.
- d. Humorists: Charles F. Browne ("Artemus Ward"), David R. Locke.
- e. Orators: DANIEL WEBSTER, Edward Everett, Henry Ward Beecher, Wendell Phillips.
- f. Novelists: JAMES FENIMORE COOPER, NATHANIEL HAWTHORNE, Harriet Beecher Stowe.

3. Present age. (1870 to present time.)

- a. Poets: Thomas Bailey Aldrich, Sidney Lanier, Celia Thaxter, Walt Whitman, EUGENE FIELD, James Whitcomb Riley.
- b. Historians: John Bach McMaster, John Fiske, Theodore Roosevelt, Edward Eggleston.
- c. Essayists: John Burroughs, Edward Everett Hale, George William Curtis, Charles Dudley Warner, Hamilton Wright Mabie.
- d. Humorists: Samuel L. Clemens ("Mark Twain"), Robert J. Burdette.
- e. Orators: James G. Blaine, William Jennings Bryan.
- f. Biographers: John Hay, Ulysses S. Grant, Julian Hawthorne.
- g. Novelists: William D. Howells, Henry James, Frank R. Stockton, Mary E. Wilkins, Lewis Wallace, Helen Hunt Jackson, Francis Bret Harte, George W. Cable, Thomas Nelson Page, James Lane Allen.

MATERIALS.

ESSENTIALS OF TEACHING READING, Sherman and Reed. University Publishing Company, Lincoln, Neb.

ACADEMIC DICTIONARIES, one for each member.

SET GRADED POETRY READERS, First to Eighth Year. Charles E. Merrill Company, New York.

THE SCHOOL POETRY BOOK, Penniman. D. C. Heath & Co., Chicago.

A CHILD'S GARDEN OF VERSES, Stevenson. Rand, McNally & Co., Chicago.

ELEMENTS OF LITERATURE AND COMPOSITION, Sherman. University Publishing Company, Lincoln, Neb.

READING: HOW TO TEACH IT, S. L. Arnold. Silver, Burdett & Co., Chicago.

HOW TO TELL STORIES TO CHILDREN, S. C. Bryant. Houghton, Mifflin & Co., Chicago.

TEACHING OF ENGLISH IN THE ELEMENTARY AND SECONDARY SCHOOL, P. Chubb. Macmillan Company, Chicago.

HOW TO TEACH READING IN PUBLIC SCHOOLS, S. H. Clark. Scott, Foresman & Co., Chicago.

LESSON I.—*Time.*

Read chapter 13, and chapter 14 to "Labials," page 151.

Study chapter 1, to middle of page 9.

Discussion of first ten questions, page 12.

First six stanzas of Gray's "Elegy," page 207, for practice.

Reference: Clark, chapter 1.

Exercises 1 and 2, page 151.

For memory: "He Who Would Thrive," Franklin. 1-12.

"Hurt No Living Thing," Christiana G. Rossetti. 3-50.

"September," Helen Hunt Jackson. 4-62.

LESSON II.—*Time.*

Complete chapter 1, with discussion of the remaining questions and suggestions.

Rules 1 and 2, page 141.

Study page 208 for practice in time. Insist on the use of the dictionary and the encyclopedia for all words of uncertain pronunciation or meaning.

For memory: "Seven Times One," Jean Ingelow. 1-48.

"Suppose," Phoebe Cary. 3-50.

"The Old Oaken Bucket," Woodworth. 4-71.

LESSON II.—*Time.*

Study of "Paul Revere's Ride," pages 219-223, for practice in varying time.

All memorize "Windy Nights" for practice in rapid time.

Exercises 3 and 4, Articulation.

For memory: Robert Louis Stevenson.

"Windy Nights," C. G. V. 22.

"The Wind," C. G. V. 52. 1-16.

"At Morning." 8-92.

"Where Go the Boats," C. G. V. 46.

LESSON IV.—*Grouping.*

Study chapter 2, entire. Discussion of review questions. In connection with the last, note that the first example contains a restrictive clause, with the emphasis on the word "hurt." Purists insist that the relative "that" should be used. This would be convenient. Unfortunately, writers do not follow the dictum, so it is valueless.

Drill in pronunciation and definition. Smithy, sinewy, forge, bellows, chaff, village, paradise, catch, sorrowing. Apply rules 1, 2, 4, 5 and 6, on pages 141, 142.

"The Village Blacksmith" for practice. Be sure that the reader and listeners form a definite picture of the "spreading chestnut tree" overshadowing the low "smithy." A group division after "smithy" would be justified. Next they must add the "smith," so placed that the details that follow can be easily recognized. Be sure that the emphasis is on "mighty."

In the third stanza there should be four groups in the first line. The smith must be at work at his anvil. The noise of the bellows and the sound of the hammer must arise in imagination, followed by the slow, measured tones of the church bell, to which the latter is likened, then by a glimpse of the sunset.

In the fourth stanza, "look in" should form one group, as should also "that fly." The grouping as suggested in the text would make the sparks fly from the threshing-floor.

In the fifth stanza there should be a group division after "pray." The smith is seen "among" a large family of boys. The service must be heard.

For memory: "Good Morning," Browning. 1-40.

"The Owl," Tennyson. 3-69.

"Nikolina," Celia Thaxter. 4-88.

LESSON V.—*Grouping.*

Study of "Barbara Frietchie," pages 217-219, for grouping. Have some of the stanzas marked.

Have a simple prose selection from a primary reader marked for grouping.

Reference: Sherman, chapter 25. Clark, chapters 1 and 4.

Exercises 5 and 6, Articulation.

For memory: "Boats Sail on the Rivers," Rossetti. 1-18.

"I Remember, I Remember," Hood. 3-70. P. 41.

"Ariel's Song," Shakespeare. 4-7.

LESSON VI.—*Emphasis.*

Study chapter 3 to the bottom of page 23.

Use the first reader to illustrate emphasis. Have the pupils mark and then read lessons, assigning a different one to each. Better results can be secured by using first these simple exercises that have no mechanical difficulties. Choose selections that have consistent paragraph relations.

References: Clark, chapters 2, 8 and 9.

Rules 3 and 4, page 141.

For memory: Robert Louis Stevenson.

"Autumn Fires," 1-19.

"The Land of Nod," C. G. V. 60.

"From a Railway Carriage," 4-7.

LESSON VII.—*Emphasis.*

Assign individual lessons from advanced first reader or from second reader.

Exercises 7 and 8, Articulation.

For memory: Robert Louis Stevenson.

"Rain," 1-17.

"Bed in Summer," C. G. V. 13. 1-67.

"Young Night Thoughts," C. G. V. 15.

LESSON VIII.—*Expression.*

Study chapter 12.

Discuss review questions, page 136.

Rules 5 and 6, page 142.

For memory: Christina G. Rossetti.

"Who Has Seen the Wind?" 1-15.

"The Swallow," 3-32.

"There's Nothing Like the Rose," 4-8.

LESSON IX.—*Emphasis.*

Continue chapter 3 to "Illustrative Lessons," page 26, and discuss review questions, page 32.

Drill exercises from second reader.

Exercises 9 and 10, Articulation.

For memory: "A Dewdrop," Frank Dempster Sherman. 1-18.

"The Piper," Blake. 3-10.

"Jack in the Pulpit," Clara Smith. 4-11.

"The Brook," Tennyson. Page 7.

LESSON X.—*Emphasis.*

Drill exercises from second or third reader.

Study "Illustrative Lessons," pages 26-31. If these exercises are read, they should be taken from primary readers, not from the text. "The Nut in the Forest" is another example of the first type. "The Three Goats" is an example of the second type.

Marking and pronunciation of words on page 143, illustrating rules 1 to 6.

For memory: "Sleep, Baby, Sleep," 1-21.
 "The Voice of Spring," Mary Howitt. 3-16.
 "Hohenlinden," Thomas Campbell. P. 30.

LESSON XI.—*Inflection.*

Study chapter 4. Discussion. For practice, exercise on pages 37, 38.
 Reference: Clark, chapter 2.

Exercises 11 and 12, Articulation.

For memory: Felicia Dorothea Hemans.

"Casabianca," 4-16.
 "Night-scented Flowers," 3-63.
 "The Landing of the Pilgrims," 5-33.

LESSON XII.—*Force.*

Study chapter 5.

Lincoln's "Gettysburg Address," pages 211-212.

Drill on diacritical marks. All sounds of "a," with type words.

For memory: Alfred, Lord Tennyson.

"Little Birdie," 1-39.
 "The Throstle," 3-22.
 "Sweet and Low," 4-82.

LESSON XIII.—*Force.*

Study "Liberty and Union," pages 214-215.

Exercises 13, 14 and 15, Articulation.

For memory: "The Baby," Macdonald. 1-37.

"The Violet," Jane Taylor. 3-23.
 "A Boy's Song," James Hogg. 3-7. 4-14.

LESSON XIV.—*Quality.*

Study chapter 6, with exercises for practice.

References: Sherman, chapter 22. Clark, chapter 3.

Diacritical marks. All sounds of "e," with type words.

For memory: William Allingham.

"Robin Redbreast," 1-43.
 "Wishing," 3-9.
 "The Fairies," 1-70.

LESSON XV.—*Examination—Mechanics of Reading.*

LESSON XVI.—*Types and Figures.*

Chapter 7, to Metonymy.

Reference: Sherman, 11-13.

The memory exercises offer good material in figures.

Diacritical marks. All sounds of "i" and "y," with type words.

For memory: "The Land of Counterpane," Stevenson, C. G. V. 33. P. 2.

"My Bed is a Boat," Stevenson. 1-45. C. G. V. 58.
 "Daisies," Frank Dempster Sherman. 1-66.

LESSON XVII.—*Types and Figures.*

Complete the text of chapter 7. Analyze exercises on page 64-65.
 The first quotation might have been written:

"Silently one by one, like flowers in infinite meadows,
 Appeared the lovely stars, like forget-me-nots of the angels."

Or again,

"Silently one by one, in infinite meadows appearing,
 Blossomed the lovely flowers, the forget-me-nots of the angels."

Either would have preserved the form and satisfied the demands of meter, giving approximately the same meaning. Let the class decide the exact difference, and the advantage in the form the poet chose.

Exercises 16, 17 and 18, Articulation.

For memory: Frank Dempster Sherman.

"Wizard Frost," 1-83.

"The Four Winds," 3-26.

"May," 6-94.

LESSON XVIII.—*Types and Figures.*

Study "The Chambered Nautilus."

Diacritical marks. All sounds of "o," with type words.

For memory: "Little White Lily," MacDonald. 1-60.

"The Violet," Lucy Larcom. 3-27.

"Jack Frost," Hannah Gould. 3-88. 4-18.

LESSON XIX.—*Types and Figures.*

Study the figures of Gray's "Elegy," pages 207-210.

Exercises 19 and 20, Articulation.

For memory: Henry W. Longfellow.

"Rain in Summer," 4-9.

"The Children's Hour," 4-20.

"Excelsior," 5-89.

"Hymn to the Night," 7-81.

"A Psalm of Life," 5-82.

"The Day is Done," 5-37.

LESSON XX.—*Drill Lesson.*

"The Southern Soldier," pages 213-214.

Diacritical marks. All sounds of "u," and the diphthongs, with type words.

For memory: Henry W. Longfellow.

"Ship of State," 8-67.

"The Arsenal at Springfield," 8-65.

"Daybreak," 7-78.

"The Builders," 6-83.

LESSON XXI.—*Effects.*

Study of chapter 8, through page 73.

Assign the exercises suggested on page 73.

Reference: Sherman, chapters 14-17.

Exercises 21 and 22, Articulation.

For memory: Robert Browning.

"Incident of the French Camp," 8-43.

"Apparitions," 8-45.

"How They Brought the Good News," text, pages 239-240. P. 79.

LESSON XXII.—*Effects.*

Exercises, page 78.

Diacritical marks. The consonants.

For memory: "I Love You, Mother," Joy Allison. 1-86, 3-92.

"Marjorie's Almanac," Aldrich. 3-94.

"Consider," Rossetti. 3-86.

LESSON XXIII.—*Effects.*

Study the "effects" in the first stanza of "How They Brought the Good News from Ghent to Aix," pages 239-240.

Exercises 23 and 24, Articulation.

For memory: Charles Kingsley.

- "The Three Fishers," 6-19. P. 72.
- "The Lost Doll," 1-42.
- "A Farewell," 4-80.
- "The Sands of Dee," 5-60.

LESSON XXIV.—*Effects.*

Complete "How They Brought the Good News from Ghent to Aix." Mark and pronounce list of words commonly mispronounced.

For memory: James Russell Lowell.

- "The First Snowfall," 6-16.
- "The Present Crisis," 8-77.
- "The Finding of the Lyre," 7-83.

LESSON XXV.—*Effects.*

Study "The Death of Little Nell," pages 236-237.

Exercises 25 and 26, Articulation.

For memory: "The Little Plant," Kate L. Brown. 1-58.

- "The Tempest," James T. Field. 3-74.
- "A Song," James Whitcomb Riley. 4-30.
- "Before the Rain," Aldrich. 6-92.

LESSON XXVI.—*Effects.*

Complete "The Death of Little Nell."

Exercise in diacritical marks.

For memory: "If I were a Sunbeam," Lucy Larcom. 1-78.

- "November," Alice Cary. 3-65.

- "The Wind in a Frolic," William Howitt. 4-48.

LESSON XXVII.—*Effects.*

Make an examination of second, third and fourth readers for material containing effects. Have illustrations read in class.

Exercises 27 and 28, Articulation.

For memory: "How the Leaves Came Down," Susan Coolidge. 1-81.

- "Thanksgiving Day," Lydia M. Child. 3-32.

- "A fairy Tale," Helen Gray Cone. 4-51.

LESSON XXVIII.

Study and read "Abraham Lincoln," pages 212-213.

Exercise in diacritical marks.

For memory: "Lady Moon," Lord Houghton. 1-92.

- "Good Night and Good Morning," Lord Houghton. 1-89.

- "Answer to a Child's Question," Coleridge. 3-90.

- From "Rime of the Ancient Mariner," Coleridge. 4-43.

LESSON XXIX.

Study and read "Liberty and Union," pages 214-215.

Exercises 29 and 30, Articulation.

For memory: "Good Night," Victor Hugo. 1-22.

- "O, Little Town of Bethlehem," Brooks. 3-73.

- "Night," Blake. 4-42.

LESSON XXX.—*Examination.*

LESSON XXXI.—*Primary Reading.*

Study chapter 9, through page 85.
 Discussion of first nine questions, page 102.
 Exercises 31 and 32, Articulation.
 For memory: William Shakespeare.
 “*Ariel’s Song,*” 1-69.
 “*Over Hill, Over Dale,*” 3-21.
 “*Hark!*” 4-44.

LESSON XXXII.—*An Eclectic Method.*

Chapter 9 to the word list, page 88.
 Discussion of questions 10 to 24.
 For memory: William Shakespeare.
 “*A Violet Bank,*” 5-7.
 “*Orpheus With his Lute,*” 6-40.
 “*Good Name,*” 7-7.
 “*Polonius’s Advice,*” 8-8.

LESSON XXXIII.—*An Eclectic Method.*

Chapter 9 to phonics, page 91.
 Discussion to question 31.
 Exercises 33 and 34, Articulation.
 For memory: William Shakespeare.
 “*A Sea Dirge,*” 5-17.
 “*The Downfall of Wolsey,*” 7-10.
 “*The Quality of Mercy,*” 8-10.
 “*Silvia,*” 8-10.
 “*Adversity,*” 8-11.
 “*Moonlight,*” 8-12.

LESSON XXXIV.—*An Eclectic Method.*

Chapter 9 to “Course in Primary Reading,” page 94.
 Discussion of question 42.
 For memory: “*The Cow,*” R. L. Stevenson. 1-62.
 “*Thank You, Pretty Cow,*” Jane Taylor. 1-59.
 “*Milking Time,*” Rossetti. 1-63.
 “*A Song,*” Riley. 3-29.
 “*The Brook Song,*” Riley. 4-22.
 “*A Southern Shower,*” Riley. 4-59.

LESSON XXXV.—*Course in Primary Readng.*

Discussion of “Course in Primary Reading.” chapter 9.
 Study chapter 15.
 Exercises 35 and 36, Articulation.
 For memory: Sir Walter Scott.
 “*Hie Away,*” 1-73.
 “*Lullaby,*” 3-87.
 “*My Native Land,*” 6-75. P. 26.
 “*Soldier, Rest!*” 7-28. P. 34.
 “*Coronach,*” 8-27.
 “*Lochinvar,*” P. 14, text, pages 216-217.

LESSON XXXVI.—*Methods in Intermediate Reading.*

Study chapter 16 to top of page 178.
 Study with the class one or two sets of second readers.
 For memory: John Greenleaf Whittier.
 “*Indian Summer,*” 3-64.
 “*The Barefoot Boy,*” 4-73.
 “*The Huskers,*” 5-27.
 “*The Frost Spirit,*” 3-67.

LESSON XXXVII.—*Methods in Intermediate Reading.*

Complete chapter 16.

Study the third reader.

Exercise 37, Articulation.

For memory: William Cullen Bryant.

“Robert of Lincoln,” 4-27.

“The Yellow Violet,” 4-52. P. 62.

“The Gladness of Nature,” 5-9.

“Song of Marion’s Men,” 6-33. P. 17.

LESSON XXXVII.—*Dramatization.*

This work can be given in any grade, using material adapted to the age of the pupils. In mixed schools it should be limited to rare occasions, as it naturally attracts the attention of all in the room, and requires too much time for limited schedule.

Finish chapter 9. Dramatize several selections of different types.

For memory: The selections for dramatization.

LESSON XXXIX.—*Silent Reading and Expression.*

Study chapter 17 to middle of page 190.

Study “Lochinvar,” pages 216-217.

Exercise 38, pages 160-161.

For memory: William Cullen Bryant.

“March,” 6-47.

“To the Evening Wind,” 6-57.

“To a Waterfowl,” 7-72. P. 77.

LESSON XL.—*Silent Reading and Expression.*

Complete chapter 17. Discussion of review questions.

For memory: Ralph Waldo Emerson.

From “Woodnotes,” 7-76.

“Duty,” 8-62.

“Concord Hymn,” 8-62.

“Each and All,” 8-63.

LESSON XLI.—*Division of the Recitation and Assignment of the Lesson.*

Study of chapter 10.

Study “The Lady of Shalott,” Parts I and II, pages 228-230.

For memory: Alfred, Lord Tennyson.

“The Shell,” 5-62.

“Break, Break, Break,” 6-56.

“The Bugle Call,” 7-50.

LESSON XLII.

Complete “The Lady of Shalott.”

For memory: Oliver Wendell Holmes.

“Old Ironsides,” 6-76. P. 26.

“The Last Leaf,” 8-74.

“The Chambered Nautilus,” 8-73.

LESSON XLIII.—*Classification of Material.*

Chapter 11, to “The fourth class,” page 119.

Discussion of first sixteen questions, page 127.

For memory: “Norse Lullaby,” Eugene Field. 4-81.

“Daffodils,” William Wordsworth. 8-25. P. 64.

“Recessional,” Kipling. 7-71.

LESSON XLIV.—*Classification of Material.*

Complete chapter 11, with discussion of remaining review questions.
For memory: "To a Mountain Daisy," Burns. 8-23.

"My Heart's in the Highlands," Burns. 7-25.

"The Star-Spangled Banner," Key. 7-32.

"Waiting," Burroughs. 7-85.

"O Captain, My Captain!" Walt Whitman. 8-80.

"Abou Ben Adhem," Leigh Hunt. P. 112.

The remaining three weeks should be devoted to a review of such parts of the work as seem to require it, to the actual reading and interpretation in class of suitable selections from the state adopted reader, and to practice teaching wherein each student in turn acts as teacher, the other pupils for the time being forming the reading class.

DOMESTIC SCIENCE.

One Unit.

The growing realization of the importance of and the interest in the study of home economics in the state has made it necessary, in so far as is possible, to establish a standard course of study. In the absence of a satisfactory text in either domestic science or domestic art, the following syllabus, with suggestive details and bibliography, insures a similarity of subject material but does not limit the individuality of the teacher.

OBJECT OF THE COURSE.

The purpose of a course in domestic science is twofold. It has both a social and an educational aspect. From a social point of view, it dignifies manual labor, it brings the school into closer relations with the home and the community, with an uplifting influence on both, and teaches that home making is a profession requiring training just as truly as does that of the doctor or the lawyer; educationally, it correlates with all other school work to so great a degree as to furnish application for much in education that may otherwise appear formal, it trains the head to purposeful thinking, and teaches the hand to obey the thought to its own greatest efficiency. Specifically, it teaches that there is a right way of preparing food so that it may serve its purpose of nourishment economically; that there is a labor saving and a labor making way of performing the household tasks; and that work well and skillfully done is not drudgery but an interest-absorbing occupation.

TIME.

The time given to the work should be three periods per week if domestic science is to be a part of the unit credit with domestic art, or should be five periods per week if it is to constitute a unit in itself. These periods must be double periods if used for laboratory work, but should be single periods if used for lecture and recitation. For the three-fifths unit, one single period for theory and two double periods for practice is suggested, and for the five-fifths unit, two single periods for theory with three double periods for practice.

PREVIOUS TRAINING.

This course is planned for those who have had no previous school training in domestic science.

EQUIPMENT.

A. LEAST POSSIBLE FOR SATISFACTORY WORK FOR CLASS OF 12:

One gas, coal or gasoline range with oven, laboratory tables to supply each student with at least 30 inches working space and one drawer for individual equipment.
Twelve gas plates.

NOTE.—For further discussion of stoves and fuel, see suggestions at end of this list.

One supply table.

One cupboard.

One teacher's desk and chair.

Six stationary towel racks or one large clothes horse.

Twelve stools.

NOTE.—A small seat may be made to draw out from table instead of using stool. (See page 23, "Outline Lessons in Housekeeping," Office of Indian Affairs, Government Printing Office, Washington, D. C., for diagram of table to which draw seat could be added.)

One refrigerator or ice box.

Twelve standard bread tins $4\frac{1}{2} \times 4\frac{1}{2} \times 9$.

NOTE.—Instead of the standard bread tins for two girls, individual bread tins $2 \times 3 \times 6$ can be made by the local hardware store, and sold at not to exceed 10 cents each. These prove very satisfactory.

One large supply canister, size to hold 50 pounds of flour.

Two 2-quart supply canisters.

Four 1-quart supply canisters.

Ten jelly glasses with lids.

One potato ricer.

One frying basket.

One frying kettle.

Six four-hole muffin pans.

Three rolling-pins.

NOTE.—Small rolling-pins are very satisfactory. These can be made by boys in manual-training work. They are not likely to be needed before the middle of the first term, hence ample time for the boys to make them.

One toaster.

Three cake tins for loaf cake.

Three wire cake coolers.

One medium-sized meat grinder.

One 2-quart coffeepot.

One 1-quart teapot.

NOTE.—Three one-quart coffee and tea pots are really much more satisfactory, i. e., a one-quart pot of each for four girls.

One large steel skillet.

One 1-quart bean pot.

One roaster with cover.

Two teakettles.

Two chemical thermometers, one Fahrenheit and one centigrade.

One bread knife.

One butcher knife.

One can opener.

One corkscrew.

One ice pick.

One knife sharpener.

One trussing needle.

One large milk pitcher.

One pair scissors.

One quart measure.

One dustpan.

One broom.

One stove brush.

One garbage bucket.

One clock.
 Five dozen tea towels. (Furnished by student, if necessary.)
 Two $\frac{1}{2}$ -dozen dishcloths. (Furnished by student, if necessary.)
 Twelve vegetable knives.
 Twelve case knives.
 Twelve forks.
 Twelve tablespoons, silver or metal.
 Twenty-four teaspoons, silver or metal.
 Twelve crockery bowls, 1 quart.
 Twelve glass measuring cups—standard, $\frac{1}{2}$ pint.
 Twelve desk plates.
 Twelve crockery ramekins.
 Twelve tin pie pans ($4\frac{1}{2}$ inches).
 Twelve dish pans.
 Twelve small sauce pans with handle.
 Twelve small steel skillets, omelet pans.
 Six small wire sieves.
 Two glass lemon squeezers.
 Six egg beaters—small size, *i.e.*, for one egg.
 Six kettles.
 Six double boilers or improvised double cookers, with sauce pan and kettle.
 Six soap dishes.
 Six scrubbing brushes.

STOVES AND FUEL.

In many towns the use of gas plates is impossible, but *some* form of individual stove *should* be supplied. There are a number of possibilities:

1. Coal-oil stoves.—Somewhat dirty, and therefore rather unsatisfactory.
2. Gasoline stoves.—Less dirty, too dangerous.
3. Electric plates.—Most ideal, very expensive.
4. Gas plates.—Furnished with gas from gasoline, retained in outside tank or cistern. Safe.
5. Alcohol stoves.—For burning denatured alcohol. (Caution should be made emphatic that under no circumstances should use of wood alcohol be permitted for burning in these stoves. Wood alcohol burns to formaldehyde and water. Formaldehyde fumes have a paralyzing effect upon muscles of eyes and throat, and wood alcohol is hence injurious to burn for light or fuel. Denatured alcohol is common ethyl or "spirit" alcohol plus a minimum quantity of poison, which renders it undrinkable. This when burned simply oxidizes to carbon dioxide and water.)

The alcohol stove seems to be most satisfactory of all. For list of varieties of these stoves address:

Orr & Lockett, hardware dealers, 71-73 Randolph St., Chicago, Ill. (Also list of domestic science equipment and table tops.)

E. H. Sheldon & Co., 320-328 N. May St., Chicago, Ill. (Also for catalogue of tables for domestic science kitchens and varieties of table tops.)

M. & D. Range Co., 96-100 Lake St., Chicago, Ill. (Also for all hardware equipment for domestic science departments.)

The Bangs Hardware Co., Chicago, Ill.

Specialists in alcohol stoves:

Manning Bowman Co., Meriden, Conn. (Send for booklet.) Cost, \$4.50 for No. 60, a very ideal little stove; also sell one for \$2.50.

The Normal alcohol stove costs \$2.50. Address Walker & Co., Boston, Mass.

Lewis & Conger, New York City, sell a stove for \$2.70.

The government bulletin on "Outline Lessons in Housekeeping," sent out from Office of Indian Affairs, Government Printing Office, quotes a price on individual alcohol stoves of \$1.25 each. At that price the stoves ought to be within the reach of any school for individual equipment. Caution should be made, in the use of the alcohol stove with tank, that the tank be filled only to two-thirds its capacity, to allow for expansion under conditions of increased warmth.

NOTE.—The government bulletin mentioned above also gives lists of individual and general equipment for classes in domestic science. That list is a "minimum" equipment, at fairly reasonable cost, and from it several mentioned articles might be wisely eliminated. A second bulletin put out by the government from the Office of Indian Affairs, entitled, "Some Things that a Girl Should Know How to Do, and Hence Should Learn How to Do While in School," will also be found helpful in this work.

B. ADDITIONAL DESIRABLE EQUIPMENT:

One fireless cooker.

Twelve small wooden spoons.

Twelve steel spatulas (6-inch).

Twelve square cake tins ($1\frac{1}{4}$ x $1\frac{1}{4}$ x $4\frac{1}{2}$).

Twelve egg whisks.

Ten safety match-holders.

Six small supply canisters or jelly glasses with lids.

Six china plates, 8-inch.

Six china plates, 6-inch.

Twelve china plates, 5-inch.

Six china cups and saucers.

Six glass sherbet cups.

Six water glasses.

One glass water pitcher.

One china creamer and sugar.

One china vegetable dish.

One china platter.

One set knives and forks, silver.

One dozen teaspoons, silver.

Three tablespoons, silver.

One carving set.

One tray.

One dining-room table.

Six dining-room chairs.

One silence cloth.

Two tablecloths.

One dozen napkins.

One centerpiece.

One tray cloth.

Course of Study in Foods.

Three-fifths unit.

1. LABORATORY.—Cleanliness, order and exactness of measurements should be emphasized.
 - A. Study of equipment.
 1. Structure of range and principles of fire building and management.
 2. Purpose and method of using utensils.
 3. Principles of cleaning.
 - B. Methods of working.
 1. Use of accurate measurements.
 2. Determination of tables of measurements.

1. LABORATORY—*Continued.*

C. Preparation and serving of the following foods in respect to
 (a) underlying principle of cookery, (b) ideal results,
 (c) manner and place of serving, with accompaniments:*

1. Water.
 - a. Sources of drinking supply.
 - b. Safe water, how procure or insure.
 - c. Water as a solvent.
 - d. Water as a carrier of flavors.
 1. Beverages—decoction, infusion.
 2. In fruits—fresh, replacement of in dried.
 3. In ices.
2. Fruits, fresh and dried.
3. Sugar, stages of cookery illustrated by candies.
4. Starch.
 - a. Experiments to show behavior with dry and moist heat differently applied.
 - b. Cookery in starchy vegetables and in sauces.
 - c. Combination of sauces with foods, to form variety of starchy dishes.
 - d. Principles of cookery applied to starchy desserts and beverages.
 - e. Cookery of starch in cereals as differing from freed starch.
5. Use of fats in foods.
 - a. Making of plain pastry and its use in pies.
 - b. Method of cooking in deep fat.
 - c. Method of cooking in shallow fat.
 - d. Economical use of fat, unfit for cookery, in making soap.
6. Protein.
 - a. Experiments to show behavior of protein at different temperatures, illustrated by soft- and hard-cooked eggs.
 - b. Enclosure of air in eggs by beating.
 - c. Eggs used for thickening in combinations of milk and eggs.
 - d. Combination of starchy and protein foods.
 - e. Cookery of cheese.
 - f. Structure and cuts of meats and fish as related to cookery and use as a protein food.
 - g. Cookery of vegetable protein in legumes and nuts.
7. Use of gelatine in plain jellies and sponges.
8. Study of leavening agents and flour mixtures.
 - a. Experiments to show effect of moisture and heat upon different agents.
 - b. Development of principles of use and care.
 - c. Preparation of quick breads and cakes to illustrate use of air, soda, and baking powder, and also the mixing of batters.
 - d. Making loaf of bread to illustrate leavening with yeast and the mixing of doughs.
9. Salads.

* For a detailed outline of single lessons, see VII and VIII. Detailed outlines of all lessons for a term's work will be found in "Principles of Elementary Cookery," which may be obtained of the State Agricultural College, Manhattan, at 25 cents each, and which should be in the hands of all pupils. Teachers also should have a copy of "Syllabus of Domestic Science and Domestic Art" for 1910-'11, published by the University of Illinois, Urbana, Ill.

1. LABORATORY—*continued.*
 - C. Preparation and serving of the following foods:
 10. Frozen dishes.
 11. Combination of principles learned and table setting and serving in the preparation and serving a simple meal.
2. THEORY.—To be taught by lecture and reference work and recitation.
 - a. Development of primitive to modern apparatus for, and methods of, cookery.
 - b. Physics of heat production.
 - c. Efficiency and economy of different fuels.
 - d. Sanitary and economic materials for utensils.
 - e. Foods in general; definition, classification, use, methods by which they are made available.
 - f. Study of the five foodstuffs as to the principles which separate them into classes.
 - g. Foods representative of or related to the different classes studied as to (a) source, (b) composition, (c) production, (d) digestion, (e) economic and nutritive value, (f) purchasing, and (g) care.
 1. Water and mineral salts—salt, water, tea, coffee, fruits, fresh vegetables.
 2. Carbohydrates—sugar, starch, fruit, vegetables, cereals.
 3. Fats—butter, cream, lard, olive oil.
 4. Protein—eggs, milk, cheese, meats, fish, legumes, nuts, gelatine.
 - h. Acids and alkalies as related to chemical leavening agents, their manufacture and adulteration.
 - i. Yeast as a plant and its relation to bread making.
 - j. Conditions which make for and against the ideal loaf of bread.
 - k. Physics of freezing.

ADDITIONAL WORK.

Two-fifths unit. Given to make Domestic Science one full unit.

1. LABORATORY—*Canning and Preserving.*—To be accompanied by lectures and recitations on preservation of food, and to occupy one-third of the additional time.
 - a. Principles of sterilization.
 - b. Cookery of fruit and vegetables in relation to preserving shape, color and flavor.
 - c. Canning.
 - d. Preserving.
 - e. Pickling.
 - f. Jelly making.
2. LABORATORY—*Invalid Cookery.*—To be accompanied by lectures and recitations on personal hygiene, and to occupy one-third of additional time.
 - a. Rules for administration of foods to invalids.
 - b. Preparation of liquid foods; drinks, broths.
 - c. Preparation of easily digested, nourishing solids.
 - d. Preparation of trays for special cases.
3. LABORATORY—*Advanced Cookery.*—To be accompanied by lectures and recitations on the home, and to occupy one-third of additional time.
 - a. More complex dishes representative of the different classes of foods not included in foods course but dependent upon them for foundation principles.
 - b. Serving meals, to give practice in marketing and serving.

4. **THEORY—*Preservation of Food.***
 - a. Conditions favorable and unfavorable to the growth of—
 1. Yeast.
 2. Mold.
 3. Bacteria.
 - b. Means of destroying microörganisms.
 - c. Relation of microörganisms to preservation of food.
 - d. Methods of food preservation.
5. **THEORY—*Personal Hygiene.***
 - a. Health—definition, value of, responsibility for, factors in.
 - b. Hygiene of—
 1. Bathing.
 2. Clothing.
 3. Feeding.
 4. Sleeping.
 5. Exercise.
 - c. Special care of—
 1. Eyes.
 2. Ears.
 3. Nose.
 4. Throat.
 5. Mouth.
 - d. Bandaging and care of wounds.
6. **THEORY—*The Home.***
 - a. Location of house in regard to drainage, sunlight, prevailing wind, neighborhood.
 - b. Considerations to be observed in planning a house.
 - c. Heating, lighting and ventilation, principles of each and relations to each other.
 - d. Convenient, abundant and pure water supply.
 - e. Disposal of sewage and garbage.
 - f. Care of the home.
 - g. Division and expenditure of income.

SUGGESTED DETAILED OUTLINE.

FOR LABORATORY LESSONS TO ILLUSTRATE EGGS USED FOR THICKENING IN COMBINATIONS OF MILK AND EGGS.

CUSTARDS.

- a. Principles.—That of the cookery of albumen. Preferred temperature 160° F. to 180° F. A custard is a mixture of egg and milk, sweetened and flavored.
- b. Methods of cooking.
 1. Soft custard.
 2. Steamed custard.
 3. Baked custard.
 4. Fried custard.
 5. Frozen custard.
- c. Utensils.
 1. For soft custard, double boiler.
 2. For baked custard, sets of cups or molds in a pan of water.
 3. For steamed custard, cups or molds, covered, set in steamer.
- d. General rule or formula for a simple soft custard.
 1. Ingredients: 1 c. milk; 1 egg; 2 tbsp. sugar; $\frac{1}{2}$ tsp. flavoring.
 2. Method of combining:
 - a. Heat milk in double boiler.
 - b. Beat egg slightly.
 - c. Pour carefully the hot milk over the other ingredients beaten together.

CUSTARDS—*continued.*

- d. General rule or formula for a simple soft custard.
- 3. Precautions:
 - a. If cooked too long it curdles.
 - b. Stir to keep smooth and avoid lumping.
 - c. Do not mix much sugar with little egg as it makes yellow threads through liquid.
 - d. Do not beat the eggs too light.
 - e. Pour the milk over the egg to avoid lumping and to rinse out the bowl.
- e. Tests when done.
 - 1. For soft custard.
 - a. Heaps on spoon.
 - b. Foam disappears.
 - c. Coats the spoon.
 - d. Thickens.
 - 2. For baked custard.
 - a. Knife blade comes out clean.
 - b. Puffs on top.
- f. Substitutes for eggs, or how fewer could be used.
 - 1. Cornstarch or flour with egg, as in puddings or sauces.
 - 2. Gelatine with egg, as in creams or Bavarians.
- g. Kinds.
 - 1. Caramel custard.
 - 2. Tapioca.
 - 3. Chocolate, cocoanut, etc., named from various flavors.
- h. Serving.
 - 1. Soft custard.
 - a. By itself.
 - b. As a sauce for puddings.
 - c. As a part of dishes like floating island.
 - d. With meringue and jelly.
 - e. Poured over fruit or cake.
- i. Suggestions.
 - 1. If curdled, beat with egg-beater, or pour back and forth using two dishes.
 - 2. Remove from double boiler as soon as cooked to prevent overcooking.
 - 3. When cooling stir occasionally to prevent coating forming.
 - 4. More mellow if flavored when hot, but more flavoring required.
 - 5. When used as a sauce, have custard thin enough to pour.
 - 6. For a thicker custard, increase the number of eggs; one egg thickens as much as one tablespoon of cornstarch.
 - 7. Usually allow 2 tbsps. sugar to each egg.
 - 8. Yolks alone make a smoother custard, two yolks substituting for one egg.
 - 9. Two whites in place of one egg make a white custard.

SUGGESTED DETAILED OUTLINE.

FOR THEORY LESSON ON EGGS.

- a. Kinds.
 - Hen, duck, goose, turkey, guinea hen, prairie chicken, plover, sea gulls, ostrich, turtle, fish.
- b. General structure.
 - 1. Shell—porous.
 - 2. Lining—a tough, white membrane.
 - 3. White—a solution of proteids enclosed in thin-walled cells.
 - 4. Yolk—an emulsion of fat in proteid solution.
 - 5. Nucleus—a starting-point of development of young chick.
 - 6. Cords—composed of albumen, suspending yolk in white.

- c. General composition.
 - 1. Water, 73.7 per cent.
 - 2. Proteid, 14.8 per cent.
 - 3. Fat, 10.5 per cent.
 - 4. Mineral matter, 1.0 per cent.
- d. Preservation.
 - 1. Fresh egg.
 - a. Rough, dull shell.
 - b. Clear when held to light.
 - c. Sink in water.
 - 2. Causes of spoiling.
 - a. Bacteria entering through pores of cell.
 - b. Development of nucleus.
 - 3. Methods of prevention.
 - a. Exclusion of bacteria by coating shell.
 - b. Providing temperature unfavorable to growth of bacteria or nucleus.
- e. Cookery.
 - 1. Requires low temperature for proper coagulation of albumen.
 - 2. High temperature toughens albumen and makes it difficult to digest.
- f. Value as food.
 - 1. Rich in proteid and fat.
 - 2. Very nutritious and completely absorbed.
 - 3. Good substitute for meat.
 - 4. Should be combined with foods rich in carbohydrates.

BIBLIOGRAPHY.

A. FOR STUDENTS.

- "Library of Home Economics," American School of Home Economics. Published by Maurice Le Bosquet, Chicago, or Whitcomb & Barrows, Boston.
- Richards and Elliot, "Chemistry of Cooking and Cleaning," Whitcomb & Barrows, Boston.
- Williams and Fisher, "Elements of the Theory and Practice of Cooking," Macmillan, New York.
- Wilson, "Handbook of Domestic Science and Household Arts," Whitcomb and Barrows, Boston.
- Snyder, "Human Foods," Macmillan, New York.
- Conn, "Bacteria, Yeasts and Molds," Ginn & Co., Chicago.
- Conn, "The Story of Germ Life," Appleton, Chicago.
- Prudden, "The Story of Bacteria," Putnam's, New York.
- Prudden, "Dust and Its Dangers," Putnam's, New York.
- Prudden, "Drinking Water and Ice Supplies," Putnam's, New York.
- Carpenter, "How the World is Fed," American Book Co., Chicago.
- Carpenter, "Foods and Their Uses," Scribner's, Chicago.
- Green, "Food Products of the World," Whitcomb & Barrows, Boston.
- Parloa, "Home Economics," The Century Co., New York.
- Richards, "Sanitation in Daily Life," Whitcomb & Barrows, Boston.
- Bevier, "The House," Whitcomb & Barrows, Boston.
- Clark, "Care of the House," Macmillan, New York.
- Price, "Handbook of Sanitation," Whitcomb & Barrows, Boston.
- Bailey, "Sanitary and Applied Chemistry," Macmillan, New York.
- Pyle, "Personal Hygiene," W. B. Saunders, 925 Walnut St., Philadelphia.
- Hill, "Practical Cooking and serving," Doubleday, Page & Co., New York.
- Farmer, "Boston Cooking School Cook Book," Little, Brown & Co., Boston.
- Farmer, "Diet for the Sick and Convalescent," Little, Brown & Co., Boston.
- Lincoln, "Boston Cook Book," Roberts Bros., now Little, Brown & Co., Boston..

- Hill, "Salads, Sandwiches and Chafing-dish Dainties," Little, Brown & Co., Boston.
 Hill, "Up-to-date Waitress," Whitcomb & Barrows, Boston.
 Springstead, "Expert Waitress," Whitcomb & Barrows, Boston.
 Lovewell, Whittemore and Lyon, "The Fireless Cooker," Home Publishing Co., 1615 College Ave., Topeka.
 White, "The Fuels of the Household," Whitcomb & Barrows, Boston.
 N. E. Goldthwaite, "Principles of Jelly Making," Illinois Experiment Station Bulletin, University of Illinois, Urbana, Ill.
 Bulletin of Kansas State Board of Health, Topeka.
 Farmers' Bulletins, U. S. Department of Agriculture, Washington, D. C.:
 No. 34, Meats: Composition and Cooking.
 42, Facts about Milk.
 63, Care of Milk on the Farm.
 74, Milk as Food.
 93, Sugar as Food.
 112, Bread and the Principles of Bread Making.
 119, Experiment Station Work.
 121, Beans, Peas, and Other Legumes as Food.
 125, Protection of Food Products from Injurious Temperature.
 126, Practical Suggestions for Farm Buildings.
 128, Eggs and Their Uses as Food.
 142, The Nutritive and Economic Value of Food.
 155, How Insects Affect Health in Rural Districts.
 166, Cheese Making on the farm.
 175, Home Manufacture and Use of Unfermented Grape Juice.
 183, Meat on the Farm: Butchering, Curing and Keeping.
 203, Canned Fruit, Preserves, and Jellies.
 234, The Guinea Fowl and Its Use as Food.
 238, Citrus-fruit Growing in the Gulf States.
 241, Butter Making on the Farm.
 249, Cereal Breakfast Foods.
 252, Maple Sugar and Syrup.
 256, Preparation of Vegetables for the Table.
 268, Industrial Alcohol: Sources and Manufacture. (Interesting to those equipping with alcohol stoves.)
 269, Industrial Alcohol: Uses and Statistics. (Interesting to those equipping with alcohol stoves.)
 270, Modern Conveniences for the Farm Home.
 293, Use of Fruit as Food.
 298, Food Value of Corn and Corn Products.
 301, Home-grown Tea.
 332, Nuts and Their Uses as Food.
 348, Bacteria in Milk.
 356, Peanuts.
 359, Canning Vegetables in the Home.
 375, Care of Food in the Home.
 389, Bread and Bread Making.
 391, Economical Use of Meat in the Home.
 413, The Care of Milk and Its Use in the Home.
 426, Canning Peaches on the Farm.
 429, Industrial Alcohol Sources and Manufacture.
 431, The Peanut.

Bulletins for Farmers' Wives (12 in number), published at College of Agriculture, Cornell University, Ithaca, N. Y. 10 cents each.

B. FOR TEACHERS.

- Halliburton, "Essentials of Chemical Physiology," Longmans, Green & Co., Chicago.
 Thompson, "Practical Dietetics," Appleton.
 Hutchison, "Food and Dietetics," Wm. Wood & Co., 51 5th Ave., New York.
 Gibson, "Beautiful Houses," Macmillan.

- Harrington, "Practical Hygiene," Lea Bros. & Co., 706 Samson St., Philadelphia.
- Wiley, "Foods and Their Adulterations," Blakiston, Philadelphia.
- Hough and Sedgwick, "Human Mechanism," Ginn & Co.
- Weeks-Shaw, "Textbook of Nursing," Appleton.
- Sherman, "Chemistry of Food and Nutrition," Macmillan.
- Leach, "Food Analysis and Inspection," Wiley & Sons, 43-45 E. 19th St., New York.
- Davis, Nathan S., "Alimentary Therapeutics, Dietetics" (edited by Cohen), Blakiston.
- Pattee, "Diet in Disease," published by author, 52 W. 39th St., N. Y.; press of H. J. Little & Co.
- Magazine: Journal of Home Economics, Benj. S. Andrews, Columbia University, New York.
- Magazine: Good Housekeeper, Springfield, Mass.
- Doctor Langworthy's Food Charts (splendid), from United States Department of Agriculture, Department of Publications. Seventeen charts for \$1.
- Bulletin No. 28, "Composition of American Food Materials," Department of Chemistry, United States Bureau of Publications, Department of Agriculture. Price, 10 cents.

EXHIBITS.

From Corn Products Refining Company, New York. Constituents of milk, in bottles; constituents of flour, in bottles. From Murdock Spice Company, Station A, Kansas City, Mo.; Walter Baker Chocolate Company, Dorchester, Mass.; Pratt Institute, New York.

EQUIPMENT DEALERS.

In many cases local dealers will be able to supply all necessary equipment, but for guidance where they are unable to do so the names of the following firms of whom materials for domestic science may be obtained are appended:

Geo. M. Clarke, Chicago. Gas fixtures. Single stoves, \$4; double stoves, \$10. Send for pamphlet of prices.

M. D. Range Company, 96-100 Lake St., Chicago. Gas fixtures and other types of stoves. These people furnish an ideal gas plate, nickel finish; swinging plate, which can be swung back, leaving desk clear.

Orr & Lockett, 71-73 Randolph St., Chicago. Alcohol stoves, gas fixtures and all domestic science hardware equipment. These people have been making a specialty of equipping domestic science kitchens, and have lists and prices, ready for inspection, from which choice may be made.

C. G. Everson & Co., 83 E. Lake St., Chicago. Stoves, gas fixtures, and all hardware.

The Bangs Hardware Company, Chicago. Alcohol stoves, oil and gasoline stoves, gas fixtures and hardware.

For alcohol stoves:

Manning Bowman Company, Meriden, Conn. Send for booklet. Stove No. 60 costs \$4.50, and costs \$0.016 per hour; another costs \$2.50.

Walker & Co., Boston, Mass. Th Norma alcohol stove. Stove costs \$2.50; cost per hour, \$0.011.

Lewis & Conger, New York. Alcohol stove with wick. Price, \$2.70.

For all dish and enamel ware supplies, Carson Pirie, Scott & Co., Chicago, furnish beautiful varieties. Send for lists and prices.

Montgomery Ward & Co., Kansas City, Mo., furnish lists for domestic science equipment.

E. H. Sheldon & Co., 320-328 North May St., Chicago. Domestic science tables. Table for four girls, including burners for gas: Opalescent glass top, \$22.50; cement fiber top, \$19.50.

Marietta Glass Company, Indianapolis, Ind. Opalescent glass table tops.

Alberne Company, Chicago, New York and Boston. Patent stone or Alberne table top. (Looks like gray marble.) Cost, \$18.

Imperial Floor Co., 1108 Granite building, Rochester, N. Y. Cement table top.

SUGGESTIONS.

Tables may be made by local carpenter, under the direction of the domestic science teacher, and covered in various ways:

Oilcloth.—This has many disadvantages.

Soft wood.—Very hard to keep clean; insanitary.

Zinc.—Sanitary; apt to wrinkle; discolors with water, salt and acids.

Hard wood.—(a) Oiled pine; (b) maple; (c) oak. All wood tables require much time on part of girls for scrubbing.

Glazed tile.—White. Cracks appear in cement after service.

Unglazed tile.

Opalescent glass.—Sanitary, ideal, beautiful.

Fiber cement.—Good.

Marble or Alberene.—Good.

Orr & Lockett, of Chicago, furnish a metal top which screws down on wood top; does not have the disadvantage of wrinkling found in zinc.

DOMESTIC ART.

OBJECT OF THE COURSE.

1. To arouse in the pupil a respect for work by teaching her that manual labor, if well and thoughtfully done, is as worthy and elevating as intellectual effort.
2. To bring the pupil to realize that a woman is not well educated unless she can use the hand as well as the head.
3. To impress her with the idea that, to produce the best results in manual as well as intellectual work, thought is required.
4. To develop an appreciation of the important part that the production of textiles and clothing plays in the industrial, economic and social world.
5. To teach economy and suitability in the purchase and making of clothing.
6. To give the pupil an understanding of the principles of hand and machine sewing, with practice to enable her to make and keep in repair her own clothing.

TIME.

Amount necessary to make two-fifths unit credit. Minimum time per period, 40 minutes.

For the following outline it will be more satisfactory to divide the time per week thus: Laboratory work, one double period; theory, one single period.

PREVIOUS TRAINING.

It is assumed that the pupils have had no previous school training in domestic art.

EQUIPMENT.

1. LEAST POSSIBLE FOR A CLASS OF 20.

For the hand work alone the regular school desks could be used, but for the cutting and making of garments tables are necessary:

Five tables, 5 or 6 ft. by 30 to 36 in., \$8 to \$10.

Twenty chairs, per dozen, \$12 to \$22.

Four sewing machines, \$85.

Iron; common flat iron, electric or gas, 50 cents to \$4.25.

Ironing board, \$1.

Drafting paper, per roll, \$4 to \$5.

Twenty yardsticks.

Closet or cupboard for storing materials and implements.

Materials for models furnished by the school so as to be uniform.

The pupil should furnish a box containing pins, needles, scissors, thread, tape measure, thimble, pincushion and emery; cost, 25 cents to \$1, according to what she may have at home.

Materials for articles and garments are furnished by the pupils.

ADDITIONAL DESIRABLE EQUIPMENT.

Locker, \$40.
 Ironing table, \$3.50.
 Exhibit case.
 Squares, \$11 per dozen.
 Skirt marker, \$15.
 Mirror, \$2 to \$25.
 Cutting table.
 Tracing boards.
 Demonstration frame.
 Illustrative material—gradual accumulation.

Course of Study in Sewing.

1. LABORATORY WORK.

a. *Hand sewing.*

Stitches—basting, running, backstitching, overcasting, hemming, overhanding.
 Seams—French, felled, hemmed, overhand.
 Hems—plain, French, flannel, faced, extension.
 Repairing.
 By patching—hemmed patch, overhand patch, darned patch.
 By darning—on linen, cotton, wool; stocking darn.
 Fastenings—buttonholes, buttons, hooks and eyes, blind loops, eyelets, tape.
 Simple embroidery—chain stitch, feather stitch, catch stitch, blanket stitch, hem stitch, satin stitch, outline stitch (if time allows).

The foregoing is to be worked out with as few models as possible, most of the sewing being done upon articles for household use and upon garments, such as a towel or pillow case, bags of various kinds, a fancy or a cooking apron, curtains, cushion covers and Christmas gifts, or upon the corset cover.

b. *Hand and machine sewing.*

Corset cover.
 Use tissue pattern.
 Long seams sewed on machine.
 Finished by hand.
 Petticoat.
 Draft pattern with simple, straight rule draft.
 Machine work entirely with exception of basting and gathering.

2. THEORY.

Study of textiles, materials and implements used.
 Cotton, flax.
 Thread, needles, pins, thimble, emery, scissors, buttons, hooks and eyes, machines.
 Evolution of spinning and weaving.
 Discussion of underwear.
 Materials—width, price, durability, suitability.
 Methods of making.
 Estimation of cost.
 Hygiene, relating especially to underwear.
 Good taste.

2. THEORY—*continued.*

Making a book illustrating cotton materials, trimmings, and methods of making, also the division of the whole amount spent for clothing, especially the amount for underwear in relation to outer garments.

Relative value of ready-made and home-made clothing; cost, durability, conditions under which it is made.

Laundering of cotton and linen.

Inventors of machinery used in textile industries; *e. g.*, Eli Whitney.

Visits to mills and manufactories if possible.

Color in relation to dress.

A FEW LESSONS IN DETAIL.

TO ILLUSTRATE SUBJECT MATTER AND METHOD.

1. LABORATORY WORK.

a. *In hand sewing.*

MODEL VI.—MATCHING STRIPES AND PATCHING.

Material.

Gingham, 6 inches by 7 inches.

Two patches, $2\frac{1}{2}$ inches square.

Thread, No. 70.

Needle, No. 9.

I.—Matching stripes.

A bias cut is a cut through both warp and woof threads. A true bias is made by laying a warp thread on a woof thread and cutting on the fold.

Model: Measure 2 inches from one corner, fold the cloth on the true bias, and cut. Make $\frac{1}{4}$ -inch turning on the bias edges and overhand them together, matching the stripes carefully. Overcast the raw edges.

II.—Patching.

A patch is a piece of cloth sewed to a garment to repair it. It may be put on in various ways, as by overhanding, hemming, and darning. A patch should be large enough to cover all worn places.

Care must be taken to have the warp and woof threads of the patch run the same way as the warp and woof threads of the garment. Stripes, checks and plaids should always match.

In patching a lined garment the patch may be overhanded to the right side.

When patching near a seam or band, it is better to rip seam or band so that the patch may be sewed in with these.

Model: In two opposite corners, measure $1\frac{1}{2}$ inches, and from this point mark off a 1-inch square. Beginning at the center, cut to each corner of the square and fold back on the lines marked.

1. Hemmed patch.

The hemmed patch is best for worn material.

Hem the garment to the patch on the right side, and on the wrong side hem the patch to the garment, lapping $\frac{1}{4}$ inch.

1. LABORATORY WORK—*continued.*a. *In hand sewing.*

II.—Patching.

2. Overhanded patch.

The overhanded patch does not overlap the material, and for this reason the strain comes on one thread on each side. It is, therefore, not as strong a patch as the hemmed patch.

Place the patch to the wrong side of the garment, overhand it to one end of the opening, and then overhand the sides and the second end. Overcast the raw edges.

b. *In machine sewing.*

Petticoat.

1. Materials.
2. Measures for pattern.
3. Draft pattern.
4. Making.

- a. Placing pattern and cutting.
- b. Basting seams.
- c. Fitting.
- d. Sewing seams.

French or felled.

e. Placket.

Make a model showing plackets before putting into the garment.

f. Placing band.

g. Finishing bottom.

Mark for length.

Dust ruffle and flounce. First make model showing dust ruffle, flounce and tucks.

h. Button and buttonhole.

2. RECITATION WORK.

a. Cotton.

History.

Countries producing it.

Kinds.

Structure—plant, fiber.

Properties.

By-products.

Culture.

Enemies.

Manufacture—from field to cloth.

Kinds of cloth.

b. Evolution of weaving.

Need of woven material.

Primitive looms—parts and uses.

Later looms.

Preparations for weaving.

Fibers in use.

These lessons as shown require several class periods. For example, the outline for petticoat may cover one-third of a year, while the study of cotton may occupy five or six class periods.

BIBLIOGRAPHY.

1. SEWING.
 "Home and School Sewing," Patton. Newson & Co., New York.
 "Textiles and Clothing," Watson. American School of Home Economics, Chicago.
 "Course in Sewing," Margaret J. Blair. Webb Publishing Company, St. Paul, Minn.
 "Sewing Course," Mary S. Woolman. F. A. Fernald, Buffalo, N. Y.
 "Embroidery and Their Stitches." Butterick Publishing Company, New York.
2. TEXTILES.
 "The Story of the Cotton Plant," Wilkinson. Appleton.
 "Cotton Spinning," Marsden. Macmillan.
 "Textiles," Dooley. D. C. Heath & Co., Chicago.
 "Textiles and Clothing," Watson.
 "Some Points in Choosing Textiles," Gibbs. University of Illinois Bulletin.
 "How We are Clothed," Chamberlain. Macmillan.
 "Flax for Seed and Fiber." Farmers' Bulletin No. 27.
 "The Cotton Plant." U. S. Bulletin No. 33.
 "Useful Fibers of the World," Dodge. U. S. Department of Agriculture.
3. WEAVING AND SPINNING.
 "Origin of Inventions," Mason. Scribner's.
 "Woman's Share in Primitive Culture," Mason. Appleton.
 "Colonial Days in Old New England," Earle. Macmillan.
 "Textiles and Clothing," Watson.
4. HISTORY, INVENTION AND INVENTORS.
 "Industrial Evolution of the United States," Wright. Scribner's.
 "Origin of Inventions," Mason.
 "Economic History," Bogart. Longmans, Green & Co.
 "Story of the Cotton Plant," Wilkinson. Appleton.
 Encyclopedia.
5. HYGIENE.
 "Personal Hygiene," Le Bosquet. American School of Home Economics.
6. COLOR.
 "Home and School Sewing," Patten.
 "Textiles and Clothing," Watson.
7. LAUNDERING.
 "Chemistry of Cooking and Cleaning," Richards. Home Science Publishing Company, Boston.
 "Laboratory Manual for Laundry," Shepherd. Juanita Shepherd, St. Anthony Park, Minn.
8. IMPLEMENTS AND MATERIALS USED.
 Twelfth Census Report of the United States.
 "A Tread Mill." O. N. T. Thread Company, Newark, N. J.
 Encyclopedia.
9. PURCHASING.
 "Hints on Clothing," Woolman. Teachers' College Bulletin, Columbia University, New York.
 "Some Points in Choosing Textiles," Gibbs.
10. HELPFUL MAGAZINES.
 Woman's Home Companion, New York.
 Journal of Home Economics, Benjamin S. Andrews, Columbia University, New York.
 The House Beautiful, Chicago.
 Good Housekeeping, Springfield, Mass.
 Ladies' Home Journal, Philadelphia.

11. SPECIAL HELP TO THE TEACHER.

"Domestic Art in Woman's Education," Cooley. Whitcomb & Barrows, Boston, Mass.

EXHIBIT WORK.

Corticelli Silk Company, St. Louis, Mo. Silk exhibit.

Wm. Crowley & Son, 211 Jackson boulevard, Chicago. Needle manufacturing exhibit.

Chattanooga Knitting Mills, Chattanooga, Tenn., for cards illustrating cotton manufacturing processes.

Belding Sewing Book. 5 cents. Published by Belding Silk Manufacturing Company, 1121 Wabash street, St. Louis, Mo.

OBSERVATION WORK.

The observation work should begin with the first review subject and should be continued throughout the year. At least once each week, or as often as practicable, the superintendent or the teacher in charge of the normal-training class should arrange a date with the grade teacher to be visited, should furnish the class an outline of the points to be observed, and should accompany the class on the visit. The following day at least a part of the recitation period should be devoted to a discussion of the results of the visit. The teacher should in a measure direct the discussion and should make it clear to the class that there is to be no criticism, and particularly no adverse criticism, of the teacher outside the classroom. The visitation may follow the order of the grades, beginning with the primary, or it may take the order in which the subject is developed in the normal-training outline. But the visitation should give the class the benefit of observing work in every grade and on every phase of the subject under consideration.

OUTLINE.

The following is suggested as a working outline of the matters to be observed. It is not expected that all of these points will be noted at any one visit; but during the course of the visitation in any one subject they should all be given careful attention.

1. CONDITION OF ROOM.
 - a. As to neatness.
 - b. As to ventilation.
 - c. As to lighting.
 - d. As to order.
 - e. As to decorations.
 - f. Summarize physical condition of room. Discuss this fully.
 - g. Were pupils and teacher as neat as could reasonably be expected.
2. SUBJECT MATTER OF LESSON.
 - a. What was it?
 - b. Was there enough of it? Too much?
 - c. Was it adapted to pupils?
3. HOW THE LESSON WAS DEVELOPED BY THE TEACHER.
 - a. Was it by quizzing, or explanation, or both?
 - b. If there was explanation was it merely repetition of textbook statements, or was it by additional facts and comparisons?
 - c. Had teacher specially prepared lesson?
 - d. Was it handled topically, or in order of the paragraphs in textbook?
 - e. Did teacher employ skill in questioning, or were questions such as were obviously suggested by textbook?
 - f. Were questions such as suggested the answer?
 - g. Were questions addressed only to a certain few, and probably the brighter ones of the class?

3. HOW THE LESSON WAS DEVELOPED BY THE TEACHER—*continued.*
 - h. Were pupils questioned in rotation?
 - i. Was attitude of those not reciting one of attention or of indifference?
 - j. Were pupils prompt in rising and responding to questions?
 - k. Were interruptions, by holding up of hands or otherwise, permitted?
 - l. How might lesson have been conducted differently with advantage?
4. THE PERSONALITY OF THE TEACHER.
 - a. Was teacher well poised, or nervous and disturbed?
 - b. Was teacher's voice well modulated?
 - c. Was teacher animated and thoroughly interested in her work?
 - d. If there was lack in any of the above respects, what, in your opinion, was the cause, and how could it be remedied?
5. HOW LESSON WAS RECITED BY PUPILS.
 - a. Their preparation.
 - b. Their presentation.
 - c. Their associations and comparisons.
 - d. Their generalizations and applications.
 - e. Did pupils speak in proper tones?
6. ASSIGNMENT OF NEXT DAY'S LESSON.
 - a. How and when made?
 - b. What was object in assignment?
7. INTEREST OF PUPILS.
 - a. Was it good?
 - b. If so, why?
 - c. If not, why not?
8. THE PUPILS AS INDIVIDUALS.
 - a. What pupils had the lesson?
 - b. What pupils did not have the lessons?
 - c. Was failure on account of lack of study, lack of previous knowledge, lack of interest, or physical defect?
 - d. What was done to correct wrong habits?
 - e. What was done to encourage good habits?

PRACTICE TEACHING.

No practice teaching is required or expected. When teachers are temporarily absent, however, the members of the normal-training class should be utilized as substitutes. But in all such cases the members of the class to so act should be given preliminary notice if possible, and the work they are to do should be outlined and canvassed with them by the teacher or superintendent.

EXAMINATION.

All applicants for normal-training certificates must have on file in the office of the state superintendent of public instruction a certificate signed by the principal of the high school or academy, showing that they are graduates, or will be graduates by June 1, of a full four-year course, including the required work in normal training, and that such school has been duly recognized for normal-training work by the State Board of Education. This certificate shall include a transcript of all grades made during the four years.

Only those pupils will be eligible to the examination whose pledges are on file in the office of the state superintendent of public instruction.

Applicants must be examined in the branches heretofore named, viz.: Juniors, in civics, hygienic physiology, and psychology; seniors, in American history, methods, management, arithmetic, geography, grammar, and reading.

It is expected that this examination will not go beyond the material outlined in this Manual, and will deal with methods of teaching as well as subject matter.

Juniors may carry grades of 60 per cent or better to the senior year, and applicants failing to secure certificates may carry both junior and senior grades of 85 per cent or better for *one year*, and at the next examination they may write upon the subjects in which they fell below that grade.

RENEWAL OF CERTIFICATES.

The State Board of Education has established the following rules governing the renewal of normal-training certificates:

First. Evidence of successful experience and professional interest on the part of holders of such certificates satisfactory to the State Board of Education.

Second. Holders shall attend two county teachers' institutes; provided, that attendance at an approved summer training school for two summers shall be accepted in lieu of such institute attendance.

Third. Holders shall pursue such a course of professional reading as shall be outlined by the State Board of Education.

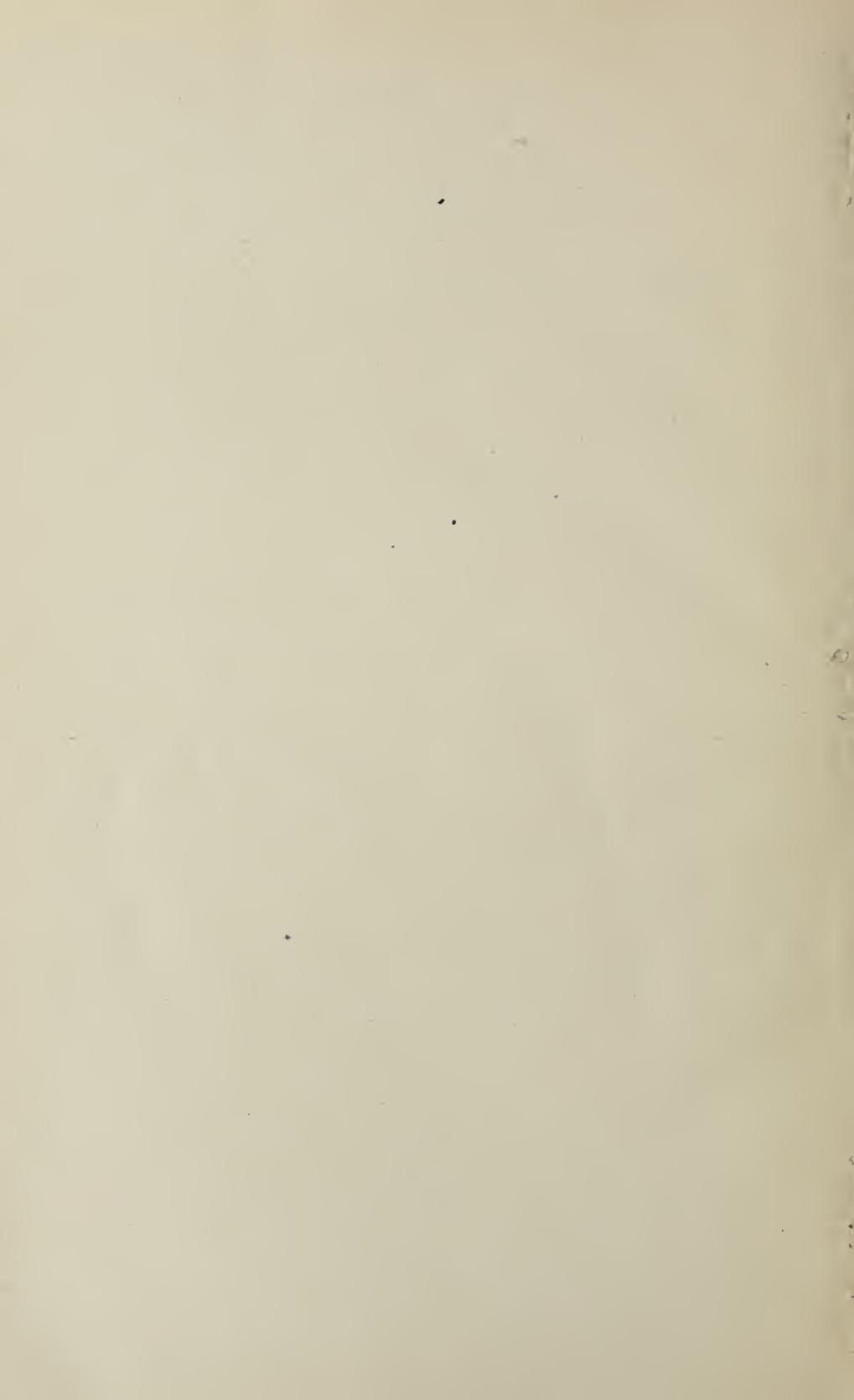
Fourth. Holders shall have taught one year of at least twenty-eight weeks out of the two years; provided, that attendance at a recognized institution of higher learning for two years shall be accepted in lieu of all other requirements.

It is expected that holders will attend one of the two institutes required before beginning to teach.

Attendance upon institute or Summer School is here held to mean attendance upon and actual participation in the regular work of the sessions for at least ninety per cent of the time, as in the case of holders of first-grade certificates.

The professional reading for the present prescribed by the State Board of Education for the first renewal of normal-training certificates is Colgrove's "The Teacher and the School," published by Charles Scribner's Sons, Chicago.

From the above requirements it will be observed that the holders of normal-training certificates are expected to be under the supervision and jurisdiction of county superintendents, the same as other teachers. And before normal-training certificates are renewed inquiry will be made of county superintendents by the state department as to attendance upon institute, professional spirit, and teaching success of holders of such certificates. Evidence that the prescribed professional reading has been done will also be required.





3 0112 062263501